GREAT LAKES
DREDGED MATERIAL TESTING AND EVALUATION MANUAL

APPENDIX C
INFORMATION FOR TIER 1 AND TIER 2 EVALUATIONS

Note: This Appendix contains numerous sources of information and names of individuals who were points-of-contact at the time this Appendix was last updated (1997). These sources of information and contacts are subject to change, and may no longer be current. An effort will be made to update this Appendix after the manual is finalized.

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SECTION 1
Computer Data Bases

This section provides information about existing environmental databases maintained by the USEPA that a 404(b)(1) evaluator might use to identify historical sediment quality data or information about potential sources of contamination in Tier 1. Some of these databases are multi-purpose, and others are maintained by the USEPA to support a specific program, such as RCRA permitting program. Fact sheets are provided for each data base with brief descriptions and access information.

The databases can be accessed through the USEPA contacts provided. In most cases, a database manager will perform the search and provide the evaluator with a report. Some lead time for coordination with the database managers should be anticipated in order to determine the format and the capabilities of the database being searched. The type of information needed to retrieve data may vary with the database. For example, STORET can query for data within a circle around a point of known latitude and longitude, or within polygon formed of points of known latitude and longitude. Other databases can make queries based on political boundaries (state, county, etc.).

When responding to certain more extensive data requests by the general public or a private 404(b)(1) permit applicant or contractor for the applicant, the USEPA database manager may occasionally ask that the request be formally transmitted through the agency's Freedom of Information Act (FOIA) office. If so instructed, the requestor should describe the desired information clearly and succinctly in a letter addressed to the "Freedom of Information Officer" at the appropriate address below. Other Federal agencies should request USEPA database information through normal coordination channels.

Region 2	Region 3	Region 5
USEPA Region 2 26 Federal Plaza New York, NY 10278	USEPA Region 3 841 Chestnut Bldg. Philadelphia, PA 19107	USEPA Region 5 77 West Jackson Street Chicago, Il 60604

STORET (STOrage RETrieval Database)

STORET Database Description

Initiated by the U.S. Public Health Service in 1961 for managing water quality data, the STORET database has grown from 140 sampling locations in 1964 to over 800,000 sampling stations. There are now more than 150 million water quality observations stored in the current database. While most data relate to surface water, sediment or groundwater quality, users can access a variety of other information, including; USGS flow data, point source effluent monitoring, locations of industrial sites, municipal waste sources and disposal systems, stream gage locations, pollution- caused fish kills, and biological survey information on distribution, abundance, and physical condition of aquatic organisms.

The two largest component systems of STORET are the Water Quality System (WQS) and the BIOS Field Survey System. The WQS contains extensive data on physical and chemical characteristics of water and sediment. WQS parameters are organized into categories such as "organics", "pesticides", and "metals". The system contains information on site description and can produce a variety of maps.

The BIOS Field Survey System is the national biological survey information repository and contains information on over 60,000 species. BIOS includes powerful analytical tools to facilitate assessments of water quality and biological integrity such as diversity indices and community structure analyses. Further, BIOS can relate biological information with physical and chemical data in the WQS file.

The STORET database can be searched in a variety of geography-based manners. Polygons can be specified that encompass the area where data is requested, or the user can search for specific localities.

STORET User Accessibility

The STORET database is accessible by anyone who needs to analyze, store or retrieve water quality related data, including:

State and local government personnel
Federal government agencies
Interstate Commissions
Commercial clients
Universities
General public through Freedom of Information Act (FOIA) requests to government agencies

STORET Points of Contact

STORET access fees are dependent upon the user category. An account can be established by contacting:

STORET
U.S. Environmental Protection Agency
Washington, D.C. 20460
(800) 424-9067
(703) 883-8861

Local assistance can be provided by contacting the following USEPA regional STORET managers:

Region 2	Region 3	Region 5
Bill Jutis	Chuck Kanetsky	Stuart Ross
STORET Manager	STORET Manager	STORET Manager
USEPA Region 2	USEPA Region 3	USEPA Region 5
26 Federal Plaza	841 Chestnut Bldg.	77 West Jackson Street
New York, NY 10278	Philadelphia, PA 19107	Chicago, IL 60604
(212) 637-3334	(215) 566-2735	(312) 353-0299

TRI (Toxic Chemical Release Inventory)

TRI Database Description

Mandated by Title III of SUPERFUND Amendments and Reauthorization Act (SARA) of 1986, the TRI database is an inventory of required reporting by industry of the releases of over 300 toxic chemicals into the air, water and land. Called the "Emergency Right-to-Know Act", Title III requires that EPA collect the information and that it be made publicly available through a computer database. This file is accessible by the public on the National Library of Medicine's (NLM) Toxicology Data Network (TOXNET).

The database is structured for menu-driven retrieval of data arranged in the broad categories:

Facility Identification
Substance Identification
Environmental Release of Chemical
Off-site Waste Transfer

This data includes the names, addresses and public contacts of plants manufacturing, processing or using the reported chemicals, the estimated quantity emitted into the air, discharged into water bodies, injected underground, or released to land, methods used in waste treatment, and data on off-site transfer of chemicals for treatment or disposal.

TRI User Accessibility

TRI is accessible 24 hours/day and 7 days/week via telephone computer modem connection. Public users must contact the TRI Representative for an account number to access the NLM online services and must pay for line charges and computer CPU time. TRI users will automatically have access to other TOXNET database services and other NLM files including the:

HSDB	Hazardous Substances Data Bank
RTECS	Registry of Toxic Effects of Chemical Substances
CCRIS	Chemical Carcinogenesis Research Information System
DBIR	Directory of Biotechnology Information Resources
ETICBACK	Environmental Teratology Info. Center Backfile
EMICBACK	Environmental Mutagen Info. Center

Other NLM files contain over 25 million references on literature related to toxic chemicals. Registered users can access TOXNET and TRI by direct dial or through TELENET, TYMNET, INFONET, or COMPUSERVE telecommunications networks.

TRI Points of Contacts

National Library of Medicine - USER SERVICES

Specialized Information Services
National Library of Medicine
8600 Rockville Pike
Bethesda, MD 20894
(301) 496-6531

Local assistance can be provided by contacting the following USEPA regional TRI managers:

Region 2	Region 3	Region 5
Nora Lopez	Craig Yussen	Thelma Codina
TRI Consultant	TRI Specialist	TRI Consultant
USEPA Region 2	USEPA Region 3	USEPA Region 5
	841 Chestnut Bldg.	77 West Jackson Street
Edison, NJ	Philadelphia, PA 19107	Chicago, Il 60604
(908) 906-6890	(215) 566-2151	(312) 886-6219

PCS (Permit Compliance System)

PCS Database Description

The Permit Compliance System (PCS) database is the national computerized tracking system for NPDES (National Pollutant Discharge Elimination System) permit compliance and enforcement status. NPDES permits are issued by the State or EPA Regions under the Clean Water Act authorization. The PCS database contains extensive records on more than 65,000 active NPDES permits issued across the nation.

The PCS database records identify and describe the permittees, specify the pollutant discharge limits for each permit, record the amounts of pollutants measured in its waste water discharge on a monthly basis, track compliance history, construction schedules, permit limits and other reporting requirements.

PCS User Accessibility

PCS software may be accessed by anyone with an account at EPA's National Computer Center located at Research Triangle Park, North Carolina. The PCS database must be accessed using the PCS Generalized Retrieval Language, so some training or assistance may be necessary. The general public can request printouts of PCS data by writing to the appropriate USEPA regional office contact listed below, or to the Freedom of Information Office of the region. Nominal fees are charged for Freedom of Information requests. Requests for PCS data should be as specific as possible.

PCS Points of Contact

Local assistance can be provided by contacting the following USEPA regional PCS managers:

Region 2	Region 3	Region 5
Roger Vann	Edna Jones	Arnold Leder
PCS Manager	PCS Manager	PCS Manager
USEPA Region 2	USEPA Region 3	USEPA Region 5
26 Federal Plaza	841 Chestnut Bldg.	77 West Jackson Street
New York, NY 10278	Philadelphia, PA 19107	Chicago, IL 60604
(212) 637-3321	(215) 566-5795	(312) 886-0133

RCRIS
(Resource, Conservation, and Recovery Act Information System)

RCRIS Database Description

The RCRIS database contains data from a variety of media at and associated with hazardous waste generating, storage and disposal facilities permitted under the Resource Recovery and Conservation Act by EPA and the States. This database is less comprehensive than STORET or PCS, but contains site-specific information about RCRA facilities.

The RCRIS system contains five data modules. The Notification module contains the names, addresses, and hazardous waste activity description. The Part A Permit Application module contains data on other permits at the site, processes and specific wastes associated with each process under permit, and facility map information. The Permit module tracks the status of closure/post-closure activity. The Compliance module contains the scope of inspections and information resulting from inspections, such as violations and enforcement actions. The Corrective Action module contains facility status and results of assessment.

The RCRIS database can be accessed through a menu-driven system on a facility or geographic basis. Zip codes, county borders and address searches are supported.

RCRIS User Accessibility

Federal users can access the system directly through contact with the regional database managers listed below. The public can initiate a database accession through a Freedom of Information Act request of the USEPA regional office.

RCRIS Points of Contacts

Region 2	Region 3	Region 5
Barry Kaye	Gmerice Wilson	Jane Ratcliffe
Database Manager	RCRIS Manager	Database Manager
USEPA Region 2	USEPA Region 3	USEPA Region 5
26 Federal Plaza	841 Chestnut Bldg.	77 West Jackson Street
New York, NY 10278	Philadelphia, PA 19107	Chicago, IL 60604
(212) 637-3323	(215) 597-6505	(312) 886-7449

GLIC (Great Lakes Initiative Clearinghouse)

GLIC Database Description

This Region 5 database tracks all water quality data reports received from State and local agencies by the State, stream name, discharger, publication date and an entry number. Copies of the listings and reports are available from the point of contact listed below.

GLIC User Accessibility

The point of contact listed below will provide the requester (agency or public) with the most expedient and appropriate method to receive copies of the required documents.

GLIC Point of Contact

Robert Pepin
USEPA Region 5
77 West Jackson Street
Chicago, IL 60604
(312) 886-1505

Niagara Frontier Program Office GIS Pilot Project

Niagara Frontier Database Description

The Niagara River Basin Geographic Information System (GIS) Pilot Project is an adjunct to a bi-national effort by Canada and the U.S. to reduce toxic loadings to the Niagara River and Lake Ontario. The GIS pilot project is a special database aids in managing, accessing and displaying data from all sources involved in this effort. This is a multi-media database and it facilitates comparisons from ambient data to all contaminant sources including point sources, non-point sources, hazardous waste sites, sediment, groundwater contamination, surface water run-off, and air deposition.

This database study area includes the USGS 11-digit site boundary code 04120104 and the majority of the area in USGS boundary code 04120103. Data includes 205 geodetic control points, hydrography data, elevations, soils, tunnels and major conduits, water quality and flow data, point source pipe and facility locations, hazardous waste site boundaries, landuse and landcover data, transportation and census data, groundwater flow data, and municipal boundaries.

Niagara Frontier User Accessibility

Contact the database manager listed below. Access will be similar to STORET but database system is not yet completed.

Niagara Frontier Point of Contact

Linda Timander (WMD-NFPO)
USEPA Region 2
26 Federal Plaza
New York, NY 10278
(212)-637-3596

ESDLS (Environmental Spatial Data Library System)

ESDLS Database Description

The Environmental Spatial Data Library System (ESDLS) created by the USEPA Systems Development Center is now available for use in Region 5. ESDLS is an Arc/INFO Library comprised of TIGER/Line 1992, Geographic Names Information System 2(GNIS2), ENVIROFACTS facilities, and USGS Digital Line Graph (DLG) data.

Unlike our current TIGER files and population tables, ESDLS stores the census population tables in Oracle, requiring that the user connect to the Oracle database and relate from the TIGER census boundary coverages to the appropriate Oracle tables. Also, note that ESDL does not provide census tract boundaries.

Likewise, the attributes of the ENVIROFACTS facility point coverages are also stored in Oracle as a component of Gateway/ENVIROFACTS. The ENVIROFACTS facility point coverage feature attribute tables contain items with the EPA identification number, and a code for the EPA data system.

The libraries are composed of Arc/INFO Version 7.0 coverages (in 8.3 file naming format) using the standard US Albers projection parameters, but using datum NAD83. (see sample projection file below.)

There are 7 libraries available for use; one at a National scale, and 6 at 1:100,000 scale (one per Region 5 state.) Libraries for NY and PA will be loaded at a later date.

ESDLS User Accessibility

http://www.epa.gov/reg5ogis/esdls.htm

ESDLS Point of Contact

Ed Partington (202) 260-3106

Fish Advisory SIG (Special Interest Group)

Fish Advisory SIG Database Description

The Fish Advisory SIG, located on the Nonpoint Source Information Exchange Bulletin Board System (NPS BBS) will provide state and local agencies, private organizations, businesses, and concerned individuals with timely information, a forum for open discussion, and the ability to exchange computer text and program files. The service has a number of "doors" through which a user can pass. Door 1 contains three files that may be searched: a table of State fish advisories, a list of contacts, and a bibliography of fish advisory related documents.

Fish Advisory Accessibility

This BBS is open to all public and agency users that have the required hardware and software:

Personal computer or terminal
Telecommunications software
1200/2400 baud Modem
Phone line that supports modem communications

The phone number to access the system is (301) 589-0205

Telecommunications parameters are:
(N-8-1), No Parity, 8 Bits, 1 Stop-bit

You will be asked to register the first time you attempt access. Then simply type **J2** at the system prompt.

Fish Advisory SIG Point of Contact

For further assistance or to receive a copy of the user's manual, call Barbara Burke at (202) 260-7136.

Other Databases

The following is a listing of other more specialized databases that can be utilized in a 404(b)(1) evaluation or associated NEPA assessment as special data requirements may arise.

AIRS (Aerometric Information Retrieval System)

This database contains national air quality, point source emissions, and area/mobile source data. Monitoring is required for critical pollutants based on population density, pollutant source types, and geographical area.

AQUIRE (Aquatic Information Retrieval System)

This database contains information on the toxicity of chemicals (excluding oils) to fresh and saltwater organisms (excluding bacteria and amphibians). It contains acute, chronic and bioaccumulation effects published in the literature that has been reviewed before results are accepted into the database.

ASTER (Assessment Tools for the Evaluation of Risk)

This database is designed to assist ecological risk assessments. ASTER integrates the AQUIRE (Aquatic toxicity Information Retrieval) database and the QSAR (Quantitative Structure Activity Relationships) expert system. ASTER provides high quality data for discrete chemicals when available, or QSAR estimates chemical behavior when data is lacking. ASTER outputs are structured in Hazard Identification, Ecological Exposure Assessment, and Risk Characterization sections.

BRS (Biennial Reporting System)

This USEPA system provides overviews and progress reports on the status of the RCRA program through trend tracking of hazardous waste generation and management.

CERCLIS (Comprehensive Environmental Response, Compensation and Liability Act Information System)

This database contains site specific information used for project planning and scheduling for all Superfund programs, Site Assessment, Remedial, Removal, and Enforcement. The system contains an automated inventory of abandoned, inactive, or uncontrolled hazardous waste sites. The system contains some enforcement sensitive information and must be accessed through the FOIA Office of the USEPA Region.

CHRIS/HACS (Chemical Hazards Response Information System and the Hazard Assessment Computer System)

This database system provides information essential to decision-making by responsible Coast Guard personnel and others during emergencies involving the water transport of hazardous chemicals. CHRIS consists of a set of manuals and two computerized components, the Hazard Assessment Computer System and MicroHACS. The manuals provide detailed information on the chemical, physical and biological properties of over 1,000 chemicals. Hazards for each chemical are identified, as are appropriate responses in the event of accidental release.

CICIS (Chemicals in Commerce Information System)

This USEPA database contains an inventory of TSCA-regulated chemicals manufactured for commercial purposes. It allows the USEPA to maintain a comprehensive listing of over 70,000 chemical substances that are manufactured or imported.

EMMI (Environmental Monitoring Methods).

This system is the USEPA source of chemical lists and catalog of standard EPA analytical methods.

ERNS (Emergency Response Notification System)

This national computer database system is used for tracking information about releases of oil and hazardous substances.

FIATS (Freedom of Information Action Tracking System)

This database is an administrative system used by Federal agency FOIA officers. The system tracks the status of requests for data under the requirements of the Freedom of Information Act.

FINDS (Facilities Index Tracking System)

This is a computerized inventory of facilities regulated or tracked by the USEPA. All facilities are assigned a unique facility identification number by the system.

FISHTEMP (National Compendium of Freshwater Fish and Water Temperature Data)

This database contains historical information on freshwater fish with accompanying water temperature data from about 1930 through 1972 for over 100 species of fish from over 574 locations in the U.S.

FRDS (Federal Reporting Data System)

This database maintains an inventory of compliance data (violations and follow-up actions) reported by primary agents under the supervision of the Public Water Supplies program.

IRIS (Integrated Risk Information System)

This database contains summary information related to human health risk assessments performed by the USEPA. This system is updated monthly and is the USEPA's primary vehicle for the communication of health hazard information representing USEPA consensus positions.

ISI (EPA Information Systems Inventory)

This USEPA database tracks 500 major information systems and facilitates sharing of information across media.

LAMS (Lake Analysis Management System)

This is a set of databases that includes water quality data collected by the USEPA Office of Research and Development program conducted by Large Lakes Research Station.

LPOW (List of Plants that Occur in Wetlands)

The Wetlands Plant List database contains plants associated with wetlands, as defined by the USFWS wetland definition and classification system. It lists scientific and common names of plants, their distribution, and the regional wetland indicator status of about 6,700 species. It can be accessed by plant name, region, State, and wetland indicator status. The database is updated as additional information is received.

NAPAP (National Acid Precipitation Assessment Program Emission Inventory)

This database contains point source emissions data and supportive quality assurance information. It is capable of generating a number of special purpose reports to support modeling and data comparison efforts.

NES_PHYTO (National Phytoplankton DataBase)

This database contains the classification and enumeration of phytoplankton algae in lakes for the National Eutrophication Survey initiated in 1972 and carried out at the Environmental Monitoring Systems Laboratory (EMSL) ever since.

NWI (National Wetlands Inventory)

This is an automated geo-referenced database containing wetlands data utilizing GIS technology. To date, more than 5,700 maps have been digitized.

NWRCDB (National Wetlands Research Center DataBase) This database provides information related to the USFWS mission in wetland and coastal areas. The database is used by the USFWS to provide natural resource inventories for selected geographic areas which are displayed as statistical maps developed by using a geographic information system (GIS).

NWUDS (National Water Use Data System)

This database contains water use information collected and maintained by the USGS. The system is comprised of two parts: the Site Specific Water Use Data System (SSWUDS) and the Aggregated Water Use Data System (AWUDS). The SSWUDS contains water use information for individual users or systems, and includes five types of data files; water use, measurement point, conveyance, annual measurements, and extended data.

OHMTADS (Oil and Hazardous Substance Material Technical Assistance Data System)

This database contains hazardous chemical identification information, such as chemical name, manufacturer's name for a chemical trade name, chemical abstract service numbers, physical properties chemicals.

OLS (On-line Library System)

This USEPA library system contains information to assist in accessing the 28 Headquarters, Regional and laboratory libraries.

PPIS (Pesticide Product Information System)

This database contains information concerning all pesticide products registered in the US. It includes registrant name and address, chemical ingredients, toxicity, brand name and other information about each pesticide.

QSAR (Quantitative Structure Activity Relationships)

This is a chemical structure/activity-based expert system that includes a database of measured physicochemical properties of chemicals such as, melting points, boiling points, vapor pressures, and water solubilities.

RODS (Record of Decision Tracking System)

This database provides the justification for the remedial action chosen under the SUPERFUND program. It was developed to track site clean-ups and stores information on the technologies being used for site remediation.

SSTS (Section Seven Tracking System)

This USEPA database tracks the registration of all pesticide producing establishments and annually tracks the types and amounts of pesticides, active ingredients, and devices that are produced, sold, or distributed in the nation.

TSCATS (Toxic Substances Control Act Test Submissions Online database)

This USEPA database contains unpublished, non-confidential test data used to monitor health, ecological, and safety effects of the toxic chemicals used by industries.

UICS (Underground Injection Control System)

This database contains an inventory of underground injection wells with facility, well, inspection, violation, compliance and permit information.

WASTELAN (Wastelands)

This is a PC LAN version of the CERCLIS database used by USEPA Regions for data input and local analysis needs.

WATSTORE (Water Data Storage/Retrieval System)

This database contains location, chemical and flow information on surface and groundwater, collected by the Water Resources Division of the US Geological Survey (USGS).

WBS (Waterbody System)

This USEPA database contains information gathered under Section 305(b) CWA on the water quality status of specific waterbodies as reported to the agency by the States. The data includes causes, sources and monitoring basis.

WVCDB (Wetlands Value Citation DataBase)

This database contains a bibliographic listing of over 14,000 scientific articles concerning the functions and values of wetlands. The database includes information on the author, year, sequence, title, source and subject of each article.

SECTION 2
USACE Data from Navigation Projects

The first attachment is a map showing the locations of the Congressionally authorized navigation projects within the USACE North Central Division. This area includes the upper Mississippi River basin as well as the Great Lakes. The USACE collects data on sediments relative to maintenance dredging activities at many of these projects.

The second attachment is a bibliography of sediment investigations conducted at navigation projects within the Buffalo District. This includes all U.S. navigation projects on Lake Erie and Lake Ontario.

The third attachment is a bibliography of sediment investigations conducted at navigation projects within the Chicago District. This includes the Illinois and Indiana portions of Lake Michigan.

The fourth attachment is a tabular summary of sediment investigations conducted at navigation projects within the Detroit District. This includes Lake Huron, Lake Superior, and the Michigan and Wisconsin portions of Lake Michigan.

Most of the bulk chemical data from studies conducted by or for the USACE districts are available on STORET. Copies of reports or data summaries are available upon written request. Requests should be directed to the following contacts:

Buffalo District	Chicago District	Detroit District
Steve Yaksich	Jay Semmler	Carla Fisher
CELRB-PE-A	CELRC-ED-HE	CELRE-CO-O
USACE, Buffalo District	USACE, Chicago District	USACE, Detroit District
1776 Niagara Street	111 North Canal Street	P.O. Box 1027
Buffalo, NY 14207-3199	Chicago, IL 60606-7206	Detroit, MI 48231-1027

Map of GL Navigation Projects

(Not yet scanned)

Bibliography of Sediment Investigations
at USACE Navigation Projects
within the Buffalo District

Ashtabula River & Harbor

"Ashtabula Harbor, Ohio," USEPA, June 1974.
4 river, 3 harbor samples
bulk chemical, benthos

"Ashtabula Harbor, Ohio - Report on the Degree of Pollution of Bottom Sediments - 1975 Harbor Sediment Sampling Program," USEPA, Region 5, Great Lakes Surveillance Branch, February 1975
16 harbor samples
bulk chemical, physical characteristics, particle size

"Ashtabula, Ohio, Report on the Degree of Pollution of Bottom Sediments," USEPA, Region 5, June 1977
5 river, 8 harbor sediment samples
bulk chemistry, elutriate, macroinvertebrate, particle size

"Report on the Degree of Pollution of Bottom Sediments, Ashtabula, Ohio - Sampled June 22, 1977," US EPA, Region 5, March 1978
5 river, 8 harbor samples
bulk chemical, elutriate, particle size, macroinvertebrate

"Aquatic Disposal Field Investigations - Ashtabula River Disposal Site, Ohio -- Evaluative Summary," WES Technical Report D-77-42, Great Lakes Laboratory, June 1978

"Aquatic Disposal Field Investigations - Ashtabula River Disposal Site, Ohio -- Appendix A: Planktonic Communities, Benthic Assemblages, and Fisheries," WES Technical Report D-77-42, Great Lakes Laboratory, July 1978

"Aquatic Disposal Field Investigations - Ashtabula River Disposal Site, Ohio -- Appendix B: Investigation of the Hydraulic Regime and Physical Nature of Bottom Sedimentation," WES Technical Report D-77-42, Great Lakes Laboratory, December 1977

"Aquatic Disposal Field Investigations - Ashtabula River Disposal Site, Ohio -- Appendix C: Investigation of Water-Quality and Sediment Parameters," WES Technical Report D-77-42, Great Lakes Laboratory, July 1978

"Ninety-Six Hour Toxicity Bioassay Tests of Ashtabula Harbor (Ohio)," Heidelberg College, September 1978
5 river, 8 harbor, 1 disposal, 1 reference samples
bioassay

"A 96-Hour Sediment Bioassay of the Ashtabula River," Heidelberg College, June 1979
6 river, 1 disposal, 1 reference, 1 beach samples
bioassay

"Field Sampling Analysis of Core Sediment Samples, Ashtabula River, Ohio," Environmental Research Group Inc., June 1979
8 river core samples
bulk chemistry, particle size

"Sampling and Analyses of Sediments from Ashtabula, Ohio," Recra Research Inc., September 1980
6 harbor, 1 disposal, 1 reference samples
bulk chemistry

"Revision of Analytical Results - Ashtabula Sediments," Recra Research Inc., December 1980
revision of results of September report

"Ashtabula Site 16 Groundwater Sampling and Analysis - Samples Collected December 15, 1982," Aqua Tech Environmental Consultants Inc., January 1983
site 16 - 7 wells
bulk chemistry

"Ashtabula Harbor Site 16 Well Sampling December 15, 1982," Floyd Browne Associates Limited, January 1983
site 16 well water quality
bulk chemistry

"Ashtabula Harbor Site 16 Well Sampling January 17 & 18, 1983," Floyd Browne Associates Limited, February 1983
site 16 well water quality bulk chemistry

"Ashtabula Harbor Site 16 Well Sampling February 21, 1983," Floyd Browne Associates Limited, March 1983
site 16 well water quality bulk chemistry

"Ashtabula Harbor Site 16 Well Sampling March 28, 1983," Floyd Browne Associates Limited, April 1983
site 16 well water quality bulk chemistry

"Ashtabula Harbor Site 16 Well Sampling April 18, 1983," Floyd Browne Associates Limited, May 1983
site 16 well water quality bulk chemistry

"Ashtabula Harbor Site 16 Well Sampling May 16, 1983," Floyd Browne Associates Limited, May 1983
site 16 well water quality bulk chemistry

"Analysis of Sediments from Ashtabula River, Ashtabula, Ohio [1983]," Technical Report No. G0072-02, Floyd Browne Associates Limited, June 1983
5 core samples - river bulk chemistry, settling test, leaching test

"Ashtabula Harbor Site 16 Well Sampling June 13, 1983," Floyd Browne Associates Limited, July 1983
site 16 well water quality bulk chemistry

"Ashtabula Harbor Site 16 Sediment Analysis November 30 and December 2, 1982," Floyd Browne Associates Limited, July 1983
5 samples bulk chemistry, particle size

"Ashtabula Harbor Site 16 Well Sampling July 18, 1983," Floyd Browne Associates Limited, August 1983
site 16 well water quality bulk chemistry

"Benthic Macroinvertebrate Sampling - Ashtabula Harbor, Ohio - August 17-19, 1983," Swanson Environmental Inc., 1983
6 harbor samples
benthic macroinvertebrate analysis

"Ashtabula Harbor Site 16 Well Sampling August 31 & September 19, 1983," Floyd Browne Associates Limited, September 1983
site 16 well water quality bulk chemistry

"Ashtabula Harbor Site 16 Well Sampling October 17, 1983," Floyd Browne Associates Limited, November 1983
site 16 well water quality bulk chemistry

"Analysis of Sediment from Ashtabula River - Ashtabula, Ohio [1983]," Technical Report No. G0130-01, Floyd Browne Associates Limited, November 1983.
14 harbor samples
bulk chemical

"Ashtabula Harbor Site 16 Well Sampling November 21, 1983," Floyd Browne Associates Limited, December 1983
site 16 well water quality bulk chemistry

"Slurry Clarification and Column Leachate Tests on Polluted Harbor Sediments," E.S. Seger and R.P. Leonard, US Army Corps of Engineers, Buffalo, 1984

"Ashtabula Harbor Core Sediment Samples Analyses," Environmental Research Group Inc., February 1984
6 sediment cores
bulk chemistry

"Column Settling and Column Leachate Tests on Polluted Harbor Sediments," Edward Segar & Richard Leonard (USACE, Buffalo), 27th Annual Conference on Great Lakes Research, May 1984

"Analysis of Sediment from Ashtabula Harbor - Ashtabula, Ohio [1984]," Technical Report No. G0130-08, Floyd Browne Associates Limited, July 1984
11 harbor & river, 3 reference, 1 disposal samples
bulk chemical, particle size, elutriate, bioassay

"Summary of Documents in the Fields Brook File that Mention Radioactive Waste at the RMI-Extrusion Plant," CH2M Hill Inc., October 1985

"The Analyses of Sediment and Water Samples from Ashtabula Dewatering Pilot Plant Project," Technical Report No. G0176-02, Aqua Tech Environmental Consultants Inc., January 1986.
28 samples (5 trial pilot plant runs)
bulk chemical

"The Analyses of Sediments from Ashtabula Harbor," Technical Report No. 10175-13, Aqua Tech Environmental Consultants Inc., November 1988
3 river, 8 harbor, 1 disposal, 3 reference samples
bulk chemistry, elutriate, bioassay, particle size

"The Analyses of Sediments from Ashtabula Harbor [1988]," TP Associates International Inc., December 1988.
11 harbor & river, 3 reference, 1 disposal samples
bulk chemical, elutriate, particle size, bioassay

"Sediment Analyses - Ashtabula Harbor - Ashtabula, Ohio [1989]," Technical Report No. G0193-09, Aqua Tech Environmental Consultants Inc., November 1989
11 samples disposal area
bulk chemical, particle size

"Monitoring of Open-Lake Disposal Area at Ashtabula Harbor 1989 - 1990," Buffalo District in-house report, 1990
benthic & sediment surveys, chemical analysis

"Sediment Analyses - Ashtabula Harbor - Ashtabula, Ohio [1990]," Technical Report No. G0218-09B, Aqua Tech Environmental Consultants Inc., July 1990
9 samples disposal area
bulk chemical, particle size

"Analysis of Bottom Sediment Placement and Movement at Ashtabula Harbor Open-Lake Disposal Area," Buffalo District in-house memorandum, September 1990

migration of sediment at disposal area

"Ashtabula, OH Site, ARDL Report Nos. 6029 and 6030," June 1992
4 river, 11 harbor, 1 disposal site, 3 reference sites
bulk chemistry, particle size, elutriate

"Evaluation of Sediments from the Ashtabula Harbor Area, Ashtabula, OH," Environmental Science & Engineering Report No. 593-1060G-0200, October 1993
6 river, 6 harbor, 3 reference
bioassays

"Pilot Scale Demonstration of Thermal Desorption for the Treatment of Ashtabula River Sediments", EPA 905-R94-021, Buffalo District, 1994

"Phase I Upper Ashtabula River Interim Dredging Monitoring", Ohio River Division Laboratory, March 22, 1994
17 river samples
PCB testing

"Phase II Upper Ashtabula River Interim Dredging Monitoring", Ohio River Division Laboratory, August 12, 1994
17 river samples
PCB testing

"1995 Sampling and PCB Bioaccumulation Study for the Ashtabula River", Engineering and Environment, Inc., October 1995
10 river samples
physical, chemical, biological, PCBs

Barcelona Harbor

"Barcelona and Rocky River Sediment Chemistry," Federal Water Pollution Control Agency memorandum, June 1970
4 harbor samples
bulk chemistry

"Barcelona Harbor - 1970 & 1972 Chemistry," EPA, 1972
3 harbor samples
bulk chemistry

"Barcelona, New York - Report on the Degree of Pollution of Bottom Sediments - Sampled: August 1, 1977," USEPA, Region 5, 1977
5 harbor samples
bulk chemistry, elutriate, benthos

Buffalo River & Harbor

"Buffalo Harbor - Sediment Sampling," (not the title - extract from an unknown report), USEPA, 1972
4 harbor, 4 river sediment samples
bulk chemistry

"Water Quality Monitoring Programs at the Buffalo Harbor Dike Disposal Site #4," Calspan Report No. 6619-M-1, Calspan Advanced Technology Center, February 1980
3 lake, 3 dike samples 8 times
bulk chemistry

"Analysis of Sediment, Water and Elutriate Water Collected and Processed from Buffalo Harbor, New York sampling Sites," Great Lakes Laboratory, October 1981
7 harbor, 3 river, 1 reference, 2 Niagara River samples
bulk chemistry, elutriate

"Buffalo Harbor Fish Study", USEPA, Region 5, 1982
14 sites
fish chemistry

"Interpretive Summary, Evaluation of Availability and Plant Uptake of Contaminants from Dredged Material from Buffalo, New York, Toledo, Ohio, and Cleveland, Ohio," WES, January 1982

"Chemical Analysis, Buffalo Harbor Sediments," Actes Testing Labs Inc., December 1983
10 harbor samples
bulk chemistry

"1981 Buffalo, New York, Area Sediment Survey (BASS)," Great Lakes National Program Office, USEPA, December 1983
103 site sediment samples - Buffalo & Niagara River
bulk chemistry, description

"Analysis of Suspended Sediment and Water Samples from Buffalo River - Buffalo, New York [1984] (Overflow Dredging)," Technical Report No. G0130-07, Aqua Tech Environmental Consultants Inc., June 1984
13 overflow water samples, 2 suspended sediment samples
bulk chemistry

"Musselwatching in the Buffalo River, Times Beach and Lake Erie," TNO, The Netherlands, November 1986
PCB & pesticide concentrations in mussels

"Investigations Conducted at the Confined Disposal Facilities, Buffalo, New York," Technical report No. 10175-07A, Aqua Tech

Environmental Consultants Inc., November 1987

water samples -	9 wells, 1 surface	Times Beach
	4 wells	Small Boat Harbor
soil samples -	4 soil	Times Beach
	3 soil	Small Boat Harbor
	4 soil	CDF

bulk chemistry, TCLP, Particle size

"Buffalo Harbor - Cladophera and Iso-octane Extract Sampling," TP Associates International Inc., November 1987
16 algal, 25 extract samples
bulk chemistry

"Investigations Conducted at the Confined Disposal Facilities, Buffalo, New York," Technical Report No. 10175-07B, Aqua Tech Environmental Consultants Inc., May 1988
12 column leachate tests

"Contaminant Mobility at Buffalo Harbor," John R. Adams, Buffalo District, July 1988

"Sediment Analyses, Buffalo River and Harbor, Buffalo, New York," Technical Report No. G0193-06A, Aqua Tech Environmental Consultants Inc., August 1989
13 river, 7 harbor, 2 Niagara River sediment samples
bulk chemistry, particle size

"The Analyses of Sediments from Buffalo Harbor," Technical Report Bioassay, Aqua Tech Environmental Consultants Inc., December 1989
8 river, 4 harbor samples
bioassay

"Transmittal of Clam Tissue Mercury Analysis", AScI Corporation, October 1996
24 samples
mercury analysis

"Black Rock Channel Laboratory Analysis Report", Laboratory Resources Inc, January 1996
1 sample from lower approach channel
chemistry testing

"Chemical and Particle Size Analyses, Sediment Samples, Black Rock Lock, Buffalo, New York", Engineering and Environment, Inc., May 1996
6 river samples
chemical and particle size analyses

"Special Sediment Study for Strawberry Island-Buffalo Harbor, NY", Engineering & Environment, Inc., October 1996

4 offshore sand samples
chemistry & particle size analysis

"Sediment Sampling for Chemical and Particle Size Analysis - Buffalo Harbor, NY", Volumes I & II, Engineering and Environment, Inc., October 1996
13 river, 7 harbor, 2 reference samples
chemistry & particle size

"Special Bioaccumulation Study for Sediment from Sampling Location 31 - Buffalo Harbor, NY" (Chemistry on sediments only), Engineering and Environment, Inc., October 1996
1 sample
chemistry & particle size

Butternut Creek

"The Analyses of Sediments from Butternut Creek," Technical Report No. G0159-11, Aqua Tech Environmental Consultants Inc., October 1985
8 creek samples
bulk chemistry, particle size

Canandaigua Lake Outlet

"Analysis of Sediment from Canandaigua Lake," Technical Report No. G0130-02, Aqua Tech Environmental Consultants Inc., December 1983
6 stream sediment samples
bulk chemistry, particle size

Cape Vincent Harbor

"Cape Vincent Harbor - 1972 Chemistry," USEPA, 1972
3 harbor sediment samples
bulk chemistry, benthos

"Laboratory Results - Harbor Dredge Samples 6/27/75," USEPA, Region 2, July 1975
5 harbor sediment samples
bulk chemistry - metals

"Cape Vincent, New York - Report on the Degree of Pollution of Bottom Sediments - Samples: November 9, 1977," USEPA, Region 5, 1977
5 harbor sediment samples
bulk chemistry, particle size, benthos, bottom

characteristics

Cattaraugus Creek Harbor

"The Analysis of Sediments from Cattaraugus Creek Harbor," Technical Report No. G0193-03A, Aqua Tech Environmental Consultants Inc., December 1988
3 river/harbor samples
bulk chemistry, elutriate, particle size

"Cattaraugas Harbor, ARDL Report Nos. 6343-6345," September 1993
4 harbor/creek, 2 nearshore sites
bulk chemistry, particle size, elutriate

Cleveland Harbor

"Cleveland Harbor - Cuyahoga River Sediment Study - November 3, 1972," (not the title - extract from an unknown report), USEPA, 1972
7 river, 8 harbor sediment samples
bulk chemistry

"Water Quality Baseline Assessment for Cleveland Area - Lake Erie, Volume I - Synthesis," EPA Project G005107, City of Cleveland, May 1974
environment impact assessment, planning and evaluation in urban water pollution abatement for the Cleveland metropolitan area

"Cuyahoga River, Ohio - Report on the Degree of Pollution of Bottom Sediments - Sampled: August 25 - November 5, 1977," USEPA, Region 5, Great Lakes National Program Office, May 1978
14 river samples
bulk chemistry, elutriate, particle size, benthos
7 river, 7 harbor samples for 1972
bulk chemistry

"Cleveland, Ohio - Report on the Degree of Pollution of Bottom Sediments - Sampled: August 24 - November 7, 1977," USEPA, Region 5, Revised October 1978
13 harbor samples
bulk chemistry, elutriate, particle size, benthos

"Analysis of Sediment and Water from the Diked Disposal Facility at Cleveland, Ohio (Prior to Disposal Operation)," State University College at Buffalo, July 1981
1 sediment, 12 water samples - Dike 14
bulk chemistry

"Water Quality in and Adjacent to and Performance of the Cleveland Diked Disposal Area 14," State University College at Buffalo, November 1981
monitor water quality during & after 7 inside & 7 outside
bulk chemistry

"Interpretive Summary, Evaluation of Availability and Plant Uptake of Contaminants from Dredged Material from Buffalo, New York, Toledo, Ohio, and Cleveland, Ohio," WES, January 1982

"Bulk Chemical Analysis of Sediment Samples Collected from Cleveland Harbor, Ohio," Bionomics No. D99-450, EG&G Bionomics, 1982
3 sediment, 3 water samples
bulk chemistry

"An Assessment of the Chemical and Toxicological Properties of Dredged Sediments Collected from Cleveland Harbor, Ohio," EG&G Bionomics, 1982
14 river, 15 harbor sediment samples
bulk chemistry, elutriate, bioassay, particle size

"Cleveland Harbor Navigation Study - ORD Test Results on River Sediment Samples," Ohio River Division, November 1982
visual & grain size

"Analysis of Sediment from Cuyahoga River, Cleveland, Ohio [1983]," Technical Report No. G0130-03, Floyd Browne Associates Limited, December 1983
15 river/harbor samples
bulk chemistry, particle size

"Sampling and Chemical Analyses of Sand from the Cuyahoga Navigation Channel and the West Basin - April 1984," Buffalo District in-house memorandum, 1984

"Analysis of Sediment from Cuyahoga River, Cleveland, Ohio [1984]," Technical Report No. G0130-06, Floyd Browne Associates Limited, May 1984
14 river/harbor samples
bulk chemistry, particle size

"Cuyahoga River, Sediment Sampling Program," Buffalo District in-house report, 1986

"The Analyses of Sediments from Cleveland Harbor, Cleveland, Ohio," Technical Report No. G0176-11, Aqua Tech Environmental Consultants Inc., August 1986
5 Edgewater Park, 6 Burke Lakefront Airport samples
bulk chemistry, benthos, particle size

"Monitoring Program Conducted at Cleveland, Ohio [1986]," Technical Report No. G0176-15, Aqua Tech Environmental Consultants Inc., September 1986
30 sampling stations - Edgewater Park
DO, nitrogen, phosphorus, fecal coliform, circulation patterns

"The Analyses of Sediments from Cleveland Harbor," Technical Report No. G0176-13A, Aqua Tech Environmental Consultants Inc., September 1986
9 river, 9 harbor sediment samples
bulk chemistry, elutriate, bioassay, particle size

"The Analyses of Sediments from the Cuyahoga River, Cleveland Ohio," Technical Report No., G0176-13B, Aqua Tech Environmental Consultants Inc., October 1986
27 river sediment samples
bulk chemistry, elutriate, bioassay, particle size

"The Analyses of Sediments for LTV Steel," Technical Report No. I0217- 01, Aqua Tech Environmental Consultants Inc., January 1988
5 upper river sediment samples
bulk chemistry, elutriate, particle size

"Sediment Analyses, Cleveland Harbor, Cleveland, Ohio," Technical Report No. G0193-07, Aqua Tech Environmental Consultants Inc., February 1990
1 harbor, 2 river samples
bulk chemistry, column settling, column leachate

"Sediment Analyses, Cuyahoga River, Cleveland, Ohio," Technical Report No. G0218-01, Aqua Tech Environmental Consultants Inc., May 1990
5 River bend samples - study
bulk chemistry, particle size

"Sediment Analyses, Cuyahoga River, Cleveland Harbor, Ohio," Technical Report No. G0218-09, Aqua Tech Environmental Consultants Inc., January 1991
1 harbor, 2 river samples
bulk chemistry, column settling, column filtration, CDF core material

Cleveland Harbor, ARDL Report Nos. 6331, 6333-6341, August 1993
22 river/channel, 8 harbor, 4 nearshore, 3 reference
bulk chemistry, particle size, elutriate

Conesus Creek

"Selected Chemical Properties of Sediments from Conesus Creek, Livingston County, New York," Great Lake Laboratories, State University College at Buffalo, March 1981
10 creek sediment samples
bulk chemistry

Conneaut Harbor

"Conneaut Harbor Sediment Sample Chemistry," (not the title - extract from an unknown report), Federal Water Pollution Control Agency, 1969
7 harbor, 3 creek samples
bulk chemistry

"Conneaut Harbor Ohio - Harbor Sampling Program," (not the title - extract from an unknown report), USEPA, 1974
3 river, 7 harbor samples
bulk chemistry, benthos

"Conneaut, Ohio - Report on the Degree of Pollution of Bottom Sediments - Sampled: June 22, 1977," USEPA, Region 5, 1977
4 river, 4 harbor samples
bulk chemistry, elutriate, particle size, benthos

"A 96-Hour Sediment Bioassay of the Conneaut Harbor - Pittsburgh & Conneaut Dock Co. Area," Technical Report 21 (Case 79009), Aqua Tech Environmental Consultants Inc., September 1979
10 sediment samples
bioassay

"Sediment Bioassays of Harbors of Lake Erie and Lake Ontario," Technical Report 79200A, Aqua Tech Environmental Consultants Inc., March 1980
12 harbor sediment samples
bioassay

"Sediment Bioassay of Harbors of Lake Erie and Lake Ontario - Work Order No. 6: Huron and Conneaut Harbors," Technical Report No. 79200D, Aqua Tech Environmental Consultants Inc., November 1980
4 river, 5 harbor, 6 reference samples
bioassay

"Analysis of Sediments from Conneaut Harbor, Conneaut, Ohio [1980]," Ecology & Environment Inc., January 1981
9 harbor, 6 reference samples
bulk chemical, elutriate, particle size

"A 96-Hour Sediment Bioassay of the Conneaut Harbor - Pittsburgh and Conneaut Dock Company Area," Technical Report 22, Aqua Tech Environmental Consultants Inc., January 1981
11 dock area sediment samples
bioassay

"The Analyses of Sediments from Conneaut Harbor, Ohio [1985]," Technical Report No. G0159-07, Aqua Tech Environmental Consultants Inc., August 1985
4 river, 6 harbor, 3 disposal, 3 reference samples
bulk chemistry, elutriate, bioassay, particle size

"Sediment Analyses, Conneaut Harbor, Conneaut, Ohio," Technical Report No. G0218-06, Aqua Tech Environmental Consultants Inc., August 1990
4 river, 6 harbor, 3 disposal, 3 reference samples
bulk chemistry, elutriate, particle size

"The Analyses of Sediments from Conneaut Harbor," Technical Report Bioassay, Aqua tech Environmental Consultants Inc., December 1990
3 river, 6 harbor, 1 disposal, 3 reference samples
bioassay

"ARDL Report Nos. 6331, 6333-6341, Corps of Engineers, Buffalo District, Cleveland Harbor Site", Volumes 1 and 2, ARDL Inc., September 1993
19 Cuyahoga channels, 3 Old River channels, 8 harbor,
4 nearshore, and 3 reference samples
physical, chemical, elutriate

"Sediment Sampling for Chemical and Particle Size Analysis - Conneaut Harbor, OH", Volumes I & II, Engineering & Environment, Inc., October 1996
10 harbor, 2 disposal, 4 reference samples
chemistry & particle size

<u>Dunkirk Harbor</u>

"Dunkirk Harbor Sampling Program," (not the title - extract from an unknown report), USEPA, Rochester Field Office, 1972
2 harbor samples
bulk chemistry

"Dunkirk Harbor Sampling - 1975," (not the title - extract from an unknown report), USEPA, 1975
7 harbor samples
bulk chemistry

"Dunkirk, New York - Report on the Degree of Pollution of Bottom Sediments - Sampled: August 2, 1977," USEPA, Region 5, 1977
5 harbor samples
bulk chemistry, elutriate, benthos

"Sediment Bioassay of Harbors of Lake Erie and Lake Ontario - Work Order No. 4: Dunkirk Harbor," Technical Report 79200B, Aqua Tech Environmental Consultants Inc., 1980
8 harbor, 4 disposal, 4 reference samples
bioassay

"The Analyses of Sediments from Dunkirk Harbor, New York," Technical Report No. G0176-06, Aqua Tech Environmental Consultants Inc., June 1986
7 harbor, 3 disposal, 3 reference samples
bulk chemistry, elutriate, bioassay, particle size

"Results of 96-Hour Sediment Bioassay Results of Sediment from Dunkirk Harbor, New York, and Erie Harbor, Pennsylvania," Supplement to Technical Reports Nos. G0176-06 and G0176-07, Aqua tech Environmental Consultants Inc., October 1986
7 harbor, 3 disposal, 3 reference samples
bioassay

"ARDL ID No. 6005, US Army District - Buffalo, Site: Dunkirk Harbor, Ohio," ARDL Inc., October 1991
7 harbor, 3 disposal, 3 reference samples
bulk chemistry, particle size

"ARDL ID No. 6006, US Army District - Buffalo, Site: Dunkirk Harbor, Ohio," ARDL Inc., October 1991
7 harbor, 3 disposal, 3 reference samples
elutriate

<u>East Harbor</u>

"Sediment Analyses, East Harbor, Ohio," Technical Report No. G0193-11, Aqua Tech Environmental Consultants Inc., November 1989
5 harbor samples
bulk chemistry, elutriate, particle size

"Sediment Analyses, East Harbor, Ohio," Technical Report No. G0193-12, Aqua Tech Environmental Consultants Inc., December 1989
2 new proposed disposal site samples
bulk chemistry, elutriate, particle size

Erie Harbor

"Erie Harbor, Pennsylvania - Report on the Degree of Pollution of Bottom Sediments - 1975 Harbor Sampling Program," USEPA, Region 5, 1975
18 harbor samples
bulk chemistry, elutriate, particle size

"Elutriate Test Data - Erie Harbor," (not the title - extract from an unknown report), Ecology & Environment, June 1980
7 sediment samples
elutriate

"Chemical, Physical and Bioassay Analysis of Sediment Samples, Erie Harbor, Erie, Pennsylvania," Applied Biology Inc., December 1982
14 Harbor sediment samples
bulk chemistry, elutriate, bioassay, particle size

"Priority Pollutants, Lake Erie and Presque Isle Bay, 1985," Erie County Department of Health, 1985
17 harbor, 2 lake sediment samples, 9 water samples
bulk chemistry

"The Analyses of Sediments from Erie Harbor, Erie, PA," Technical Report No. G0176-07, Aqua Tech Environmental Consultants Inc., June 1986
16 harbor samples
bulk chemistry, elutriate, bioassay, particle size

"Results of 96-Hour Sediment Bioassay Results of Sediment from Dunkirk Harbor, New York, and Erie Harbor, Pennsylvania," Supplement to Technical Reports Nos. G0176-06 and G0176-07, Aqua Tech Environmental Consultants Inc., October 1986
12 sediment samples
bioassay

"Sediment Sampling and Testing, Erie Harbor, PA," Bowser-Morner Inc., September 1992
11 harbor, 1 disposal, 1 lake reference samples
bulk chemical, particle size, elutriate, bioassay

"1995 Sampling of Erie harbor, Erie, Pennsylvania", Volumes I & II, Engineering & Environment, Inc., November 1996
3 channel, 4 upland, 2 CDF samples
chemistry & particle size

Euclid Creek

"Bulk Chemical Analysis of Sediment Samples Collected from Euclid Creek, Ohio," Bionomics No. D39260, EG&G Bionomics, November 1981
5 stream sediment samples
bulk chemistry

Fairport Harbor

"Fairport Harbor and Grand River Sediment Study - November 6, 1972," USEPA, 1972
3 river, 3 harbor samples
bulk chemistry

"Fairport Harbor, Ohio," (not the title - extract from an unknown report), USEPA, 1974
12 river samples
bulk chemistry

"Fairport Harbor, Ohio - Report on the Degree of Pollution of Bottom Sediments - 1975 Harbor Sampling Program," USEPA, Region 5, 1975
11 harbor samples
bulk chemistry, elutriate, particle size, bottom characteristics

"Fairport, Ohio - Report on the Degree of Pollution of Bottom Sediments - Sampled: June 24, 1977," USEPA, Region 5, 1977
6 river, 5 harbor samples
bulk chemistry, elutriate, particle size, benthos

"Sediment Bioassays of Harbors of Lake Erie and Lake Ontario," Technical Report 79200A, Aqua Tech Environmental Consultants Inc., March 1980
6 river, 5 harbor sediment samples
bioassay

"The Toxicity of dredged Materials from Fairport Harbor, Ohio to Aquatic Organisms," Bionomics Report No. Bw-82-3-1142, EG&G Bionomics, March 1982
6 river, 5 harbor sediment samples
bioassay

"Report on the Analysis of Surface Sediment Grab Samples for the U. S. Army Corps of Engineers' Lake Erie Harbor Dredging Program," Wadsworth Testing Laboratories Inc., November 1981
6 river, 5 harbor, 1 disposal, 1 reference samples
bulk chemistry, elutriate, bioassay, particle size

"Fairport, Ohio Harbor (memorandum)," Empire Soils Investigation, May 1982
7 samples
particle size

"The Analyses of Sediments from Fairport Harbor - Fairport Harbor, Ohio," Technical Report No. G0176-09, Aqua Tech Environmental Consultants Inc., August 1986
6 river, 5 harbor, 3 disposal, 3 reference samples
bulk chemistry, elutriate, bioassay, particle size

"ARDL ID No. 6017, Corps of Engineers - Buffalo District, Site: Fairport Harbor - Bulk Sediment," ARDL Inc., November 1991
6 river, 5 harbor samples
bulk chemistry, particle size

"ARDL ID No. 6014, Corps of Engineers - Buffalo District, Site: Fairport Harbor - Elutriate," ARDL Inc., November 1991
6 river, 5 harbor samples
elutriate

"Sediment Sampling for Chemical and Particle Size Analysis - Fairport Harbor, OH", Volumes I & II, Engineering & Environment, Inc., October 1996
11 harbor/river, 2 disposal, 4 reference
chemistry & particle size

Fort Drum, New York

"The Analyses of Sediments from Ft. Drum," Technical Report No. G0176- 01, Aqua Tech Environmental Consultants Inc., December 1985
2 sediment samples - Remington Pond (St. James Lake)
bulk chemistry, particle size

"EP Toxicity Testing from Ft. Drum," Technical Report No. G0176-08, Aqua Tech Environmental Consultants Inc., June 1986
2 sediment samples - Remington Pond (ST. James Lake)
EP toxicity test data

Great Sodus Harbor

"Great Sodus Bay," (not the title - extract from an unknown report), USEPA, 1972
3 channel, 1 bay, 1 disposal sample
bulk chemistry

"Analysis of Sediment from Oswego Harbor, Great Sodus Harbor and

Little Sodus Harbor," Macola Inc., August 1981
3 harbor samples
bulk chemistry, elutriate, bioassay, particle size

"The Toxicity of Dredged Materials from Oswego, Great Sodus, and Little Sodus Harbors to Aquatic Organisms," Report No. BW-81-10-1034, EG & G, Bionaomics, October 1981
3 samples
bioassay

Huron Harbor

"Huron Harbor Ohio," (not the title - extract from an unknown report), USEPA, 1973
3 channel samples
bulk chemistry, benthos

"Huron, Ohio - Report on the Degree of Pollution of Bottom Sediments - Sampled: September 10, 1975," USEPA, Region 5, 1975
9 harbor sediment samples
bulk chemistry, particle size, benthos, bottom characterization

"Huron, Ohio - Report on the Degree of Pollution of Bottom Sediments - Sampled: September 8 and September 10, 1976," USEPA, Region 5, 1976
5 river/harbor, 12 channel samples
bulk chemistry, elutriate, particle size, benthos

"Huron, Ohio - Report on the Degree of Pollution of Bottom Sediments - Sampled: September 10, 1975," USEPA, Region 5, 1976
5 river, 4 channel samples
bulk chemistry, particle size, benthos, bottom character

"1976 Huron Harbor, Ohio - Dike Study," USEPA, Region 5, 1977
3 inside, 6 outside dike samples
bulk chemistry

"Sediment Bioassays of Harbors of Lake Erie and Lake Ontario," Technical Report 79200A, Aqua Tech Environmental Consultants Inc., March 1980
8 harbor sediment samples
bioassay

"Sediment Bioassay of Harbors of Lake Erie and Lake Ontario - Work Order No. 6: Huron and Conneaut Harbors," Technical Report No. 79200 Aqua Tech Environmental Consultants Inc., November 1980
11 river/harbor, 6 reference samples
bioassay

"Analysis of Sediments from Huron Harbor, Huron, Ohio [1980]," Ecology & Environment Inc., January 1981
11 harbor, 6 reference samples
bulk chemistry, elutriate, particle size

"Sampling of Navigation Channel Sediments at Sandusky and Huron Harbors as Potential Sand Sources for Littoral Nourishment," Buffalo District memorandum, 1984
6 grab, 1 core samples
particle size

"Analysis of Sediments from Huron Harbor, Ohio [1985]," Technical Report No. G0159-06, Aqua Tech Environmental Consultants Inc., July 1985
10 river/harbor, 3 disposal, 3 reference samples
bulk chemistry, elutriate, bioassay, particle size

"ARDL ID No. 6003, US Army District - Buffalo, Site: Huron Harbor, Ohio," ARDL Inc., October 1991
16 sediment samples
bulk chemistry, particle size

"ARDL ID No. 6004, US Army District - Buffalo, Site: Huron Harbor, Ohio," ARDL Inc., October 1991
16 sediment samples
elutriate

"Sediment Sampling for Chemical and Particle Size Analysis - Huron Harbor, OH", Volumes I & II, Engineering & Environment, Inc., October 1996
10 harbor, 2 disposal, 4 reference samples
chemistry & particle size

<u>Keuka Lake Outlet</u>

"The Analyses of Sediments from Keuka Lake Outlet," Technical Report No. G0176-18, Aqua Tech Environmental Consultants Inc., September 1986
4 outlet sediment samples
bulk chemistry, particle size

<u>Little River, Niagara Falls NY</u>
"Analysis of Sediment from Little River - Niagara Falls, New York [1983]," Technical Report No. G0130-04, Floyd Browne Associates Limited, December 1983
12 river samples bulk chemistry
EP toxicity

Little Salmon River/Mexico Bay

"Little Salmon River/Mexico Bay, New York - Report on the Degree of Pollution of Bottom Sediments - Sampled July 27, 1976," USEPA, Region 5, 1976
3 river, 1 lake sediment samples
bulk chemistry, benthos, particle size, bottom characterization

Little Sodus Harbor

"1969 Bottom Sediment Analysis - Little Sodus Harbor," (not the title - extract from an unknown report), FWPCA, 1969
4 harbor samples
bulk chemistry

"Little Sodus Bay," (not the title - extract from an unknown report), USEPA, July 1972
3 harbor samples
bulk chemistry, benthos

"Analysis of Sediment from Oswego Harbor, Great Sodus Harbor and Little Sodus Harbor," Macola Inc., August 1981
2 harbor samples
bulk chemistry, elutriate, bioassay, particle size

"The Toxicity of Dredged Materials from Oswego, Great Sodus, and Little Sodus Harbors to Aquatic Organisms," Report No. BW-81-10-1034, EG & G, Bionaomics, October 1981
1 sediment sample
bioassay

"Final Data Report Sediment Sampling and Testing Little Sodus Bay Harbor, New York", Volumes 1 and 2, Acres International Corporation, December 1994
7 harbor, 2 reference, 2 disposal samples
chemical, physical, and elutriate testing

Lorain Harbor

"Sediment Analysis of Lorain Harbor," (not the title - extract from an unknown report), USEPA, July 1974
9 river, 1 harbor samples
bulk chemistry

"Lorain Harbor, Ohio, Report on the Degree of Pollution of Bottom Sediments, 1975 Harbor Sediment Sampling Program," USEPA, Region 5, 1975

5 river, 9 harbor samples
bulk chemistry, elutriate, particle size

"Bulk Chemical Analysis of Sediment Samples Collected from Lorain Harbor, Ohio," EG&G Bionomics, January 1982
4 harbor sediment samples
bulk chemistry

"Analysis of Sediment from Lorain Harbor, Lorain, Ohio," Technical Report No. G0128-01, Floyd Browne Associates Limited, December 1983
4 river, 9 harbor, 4 reference samples
bulk chemistry

"The Analyses of Sediments from Lorain Harbor," Technical Report No. 10175-10, T.P. Associates International Inc., July 1988
11 river, 10 harbor, 3 reference samples
bulk chemistry, elutriate, particle size

"Lorain Harbor, OH, ARDL Report Nos. 6346-6349," October 1993
10 channel, 7 harbor, 3 reference
bulk chemistry, elutriate, particle size

Niagara River

"Black Rock Canal - Sediment Sampling 1972," (not the title - an extract from an unknown report), USEPA, 1972
3 Black Rock Canal samples
bulk chemistry

"Niagara River Harbors at Tonawanda and Cayuga Islands - Sediment Sampling 1972," (not the title - an extract from an unknown report), USEPA, 1972
4 sediment samples
bulk chemistry

"Niagara Frontier Sampling Results," USEPA, March 1983
33 samples
bulk chemistry

Oak Orchard Harbor

"Oak Orchard, New York - Report on the Degree of Pollution of Bottom Sediments - Sampled: November 8, 1977," USEPA, Region 5, 1977
4 river, 2 harbor samples
bulk chemistry, elutriate, particle size, benthos

"Analysis of Sediment - Oak Orchard Harbor, Oak Orchard, New York," Technical Report No. G0130-09, Aqua Tech Environmental Consultants Inc., July 1984
7 river & harbor samples
bulk chemistry, elutriate, bioassay, particle size

"The Analyses of Sediments from Oak Orchard Harbor," Technical Report No. I0175-05, T. P. Associates International Inc., August 1987
4 river, 3 harbor samples
bulk chemistry, elutriate, particle size

"Results of 96-Hour Sediment Bioassay Tests, Sediment from Oak Orchard Harbor," Technical Report No. I0175-05, T. P. Associates International Inc., September 1987
4 river, 3 harbor samples
bioassay

"Sediment Sampling and Testing, Oak Orchard Harbor, NY," Bowser-Morner Inc., July 1992
5 harbor, 1 disposal, 1 reference samples
bulk chemical, particle size, elutriate, bioassay

Ogdensburg

"Laboratory Results - Harbor Dredge Samples 6/27/75," (not the title - extract from an unknown report), USEPA, Region 2, July 1975
5 harbor sediment samples
bulk chemistry, bottom characteristics

"Ogdensburg Harbor, New York - Report on the Degree of Pollution of Bottom Sediments - Sampled: July 27, 1976," USEPA, Region 5, 1976
3 harbor samples
bulk chemistry, elutriate

"Sediment Quality Testing at Ogdensburg Harbor, New York," Great Lakes Laboratory, State University College at Buffalo, September 1981
11 channel, 3 reference samples
bulk chemistry, elutriate, particle size

"The Toxicity of Dredged Materials from Ogdensburg Harbor to Aquatic Organisms," Report No. BW-81-11-1040, EG & G, Bionomics, November 1981
10 harbor samples
bioassay

"The Toxicity of Dredged Materials from Odgensburg Harbor to Aquatic Organisms," Report No. BW-82-1-1094, EG&G Bionomics, January 1982
10 harbor samples
bulk chemistry, bioassay

Olcott Harbor

"Olcott Harbor," (not the title - extract from an unknown report), USEPA, 1972
6 harbor samples
bulk chemistry

"Olcott Harbor, New York - Report on the Degree of Pollution of Bottom Sediments - Sampled: November 7 - 10, 1977," USEPA, Region 5, 1977
6 river, 5 lake samples
bulk chemistry, elutriate, particle size, benthos, bottom characteristics

"Sediment Quality Testing at Olcott Harbor, New York and Wilson Harbor, New York Sampling Sites," Great Lakes Laboratory, State University College at Buffalo, September 1981
5 harbor, 1 reference, 1 disposal samples
bulk chemistry, elutriate, bioassay, particle size

"The Toxicity of Dredged Materials from Olcott Harbor, New York to Aquatic Organisms," Bionomics Report No. BW-82-1-1098, EG&G Bionomics, January 1982
4 river/harbor, 2 disposal, 3 reference samples
bioassay

"Great Lakes National Program Office - Harbor Sediment Program - Lake Ontario 1981: Rochester New York, Oswego New York, Olcott New York," USEPA, Great Lakes Program Office, April 1984
5 river samples
bulk chemistry

"The Analyses of Sediments from Olcott Harbor," Technical Report No. I0175-04, Aqua Tech Environmental Consultants Inc., July 1987
6 river/harbor, 1 reference samples
bulk chemistry, elutriate, particle size

"Results of 96-Hour Sediment Bioassay Tests - Sediments from Olcott Harbor," Technical Report No. I0175-04, T. P. Associates International Inc., September 1987
6 river/harbor, 1 reference samples
bioassay

"Sediment Analyses - Olcott Harbor, Olcott, New York," Technical Report No. G0193-08A, Aqua Tech Environmental Consultants Inc., September 1989
11 river samples
bulk chemistry, elutriate, particle size

"The Analyses of Sediments from Olcott Harbor," Aqua Tech Environmental Consultants Inc., December 1989
7 river samples
bioassay

Oswego Harbor

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5 harbor samples
bulk chemistry, benthos, bottom description

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8 harbor samples
bulk chemistry

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2 river, 4 harbor samples
bulk chemistry

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2 river, 4 harbor samples
bulk chemistry

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12 harbor samples
bulk chemistry, elutriate, particle size, benthos

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13 harbor samples
bulk chemistry, elutriate, bioassay, particle size

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6 sediment samples

bioassay

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4 river samples
bulk chemistry

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3 river, 12 harbor, 2 disposal, 3 reference samples
bulk chemistry, elutriate, bioassay, particle size

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4 river samples
bioassay

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10 harbor, 2 disposal, 4 reference locations
grain size, bulk chemistry

<u>Port Clinton</u>

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4 harbor sediment samples
bulk chemistry, elutriate, particle size, benthos, bottom characterization

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4 river/harbor samples
bulk chemistry, elutriate, particle size

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5 river, 3 reference samples
bulk chemistry, elutriate, bioassay, particle size

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5 harbor samples
bulk chemical, particle size, elutriate, bioassay

Port Ontario

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3 river, 1 lake sediment samples
bulk chemistry, particle size, benthos, bottom characterization

Rochester Harbor/Irondequoit Bay

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4 river, 1 disposal samples
bulk chemistry

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sampling in 1967 - 1969, 1972, 1973
4 harbor samples
bulk chemistry

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6 harbor, 4 lake, 2 upland samples
bulk chemistry

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7 river, 3 harbor, 1 reference samples
bulk chemistry, elutriate, particle size, benthos

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13 Bay sediment samples
bulk chemistry, particle size, benthos, bottom characterization

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13 bay sediment samples
bulk chemistry, particle size, benthos, bottom characterization

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7 river, 3 harbor, 3 disposal, 4 reference samples
bioassay testing

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10 harbor, 3 disposal, 4 reference samples
bulk chemistry, elutriate, particle size

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14 river samples
bulk chemistry

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10 river, 2 disposal, 2 reference samples
bulk chemistry, elutriate, bioassay, particle size

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3 events, dredge bin 3 inflow, 3 overflow, bin contents samples
bulk chemistry, bioassay, particle size

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Rochester: 10 river, 2 disposal, 2 reference samples
Irondequoit: 3 harbor, 1 beach nourishment samples
bulk chemistry, elutriate, particle size

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Rochester - 10 river, 1 disposal, 1 reference samples
Irondequoit - 3 river/harbor, 1 beach nourishment samples
bioassay

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10 river/harbor, 1 reference samples
dioxin, dibenzofuran, PCB

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8 river/harbor, 2 reference, 2 disposal samples
bioassay

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9 river, 2 reference, 2 disposal samples
physical and chemical testing

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8 harbor samples
physical and chemical testing

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4 open-lake disposal samples
physical, chemical, benthic analyses

Rocky River

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4 harbor samples
bulk chemistry

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6 river, 1 channel samples
bulk chemistry, elutriate, particle size, benthos

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bulk chemistry, elutriate, bioassay, particle size

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bioassay

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6 sediment samples
bulk chemistry, elutriate, particle size

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5 river/harbor sediment samples
bulk chemistry, elutriate, particle size

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6 harbor/river, 2 disposal, 4 reference
chemistry & particle size

Sackets Harbor

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11 harbor sediment samples
bulk chemistry, bottom characteristics

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10 harbor samples
bulk chemistry, elutriate, particle size, benthos

St. Lawrence River

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45 sediment samples
bulk chemistry, sediment characteristics, benthos

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benthos and substrate characteristics

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11 river sediment samples
bulk chemistry, elutriate, bioassay, particle size

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8 bore holes across river

bulk chemistry, particle size

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7 channel samples
bulk chemistry, benthos

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14 channel, 5 bay samples
bulk chemistry, elutriate, particle size, bottom characteristics

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11 channel samples
bulk chemistry, elutriate, particle size, benthos

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11 harbor sediment samples
bioassay

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11 harbor, 1 reference, 1 disposal samples
column leach test, bulk chemistry, elutriate, particle size

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26 grab, 7 core samples
particle size

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bulk chemistry, elutriate, bioassay, particle size

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11 harbor/channel, 3 disposal, 3 reference samples
bulk chemistry, elutriate, particle size

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11 harbor/channel, 3 disposal, 3 reference site samples
bioassay

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11 harbor, 2 disposal, 4 reference samples
chemistry & particle size

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bulk chemistry, particle size

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9 lake channel samples
bulk chemistry, macroinvertebrate study, particle size

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bulk chemistry, particle size, benthos

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32 lake channel sampling stations, 8 composite samples
bulk chemistry, bioassay

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7 river, 8 lake channel samples
bulk chemistry, elutriate, bioassay, particle size

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analysis of the effects of open lake dumping

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8 river, 7 lake samples, CDF water
bulk chemistry, particle size, settling tests

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18 samples, column leach testing
bulk chemistry

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3 sediment samples
bulk chemistry, particle size

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analysis of the effects of open lake dumping

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5 CDF water samples
bulk chemical

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11 field monitoring events, 13 sample sets, 6 hopper dredge samples
bulk chemistry

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phosphorus

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CDF overflow, 117 samples for suspended sediment
10 samples & 8 vicinity samples for bulk chemistry

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9 disposal samples
bulk chemistry, bioassay, particle size, benthos at proposed new disposal site

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6 lake samples
bulk chemistry

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8 disposal, 1 reference site samples
bulk chemistry, bioassay, benthic study

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7 river, 17 lake channel, 4 disposal samples
bulk chemistry, elutriate, bioassay, particle size

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78 river/lake samples
bioassay

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6 harbor samples
particle size

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3 harbor samples
grain size

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3 samples

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3 samples

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1 river, 7 entrance channel, 2 reference
bioassays

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5 CDF core borrow sites
bulk chemistry, particle size

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1 river, 7 entrance channel, 2 reference
bioassays

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9 river/harbor, 1 reference sample

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9 river samples
bioassay

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9 harbor, 1 reference sample
bioassay testing

Touissant River

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3 core samples, 2 composite samples of each core
bulk chemistry

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2 harbor entrance, 4 lake samples
bulk chemistry, elutriate

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4 samples
bioassay

Vermilion Harbor

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4 sediment samples
bulk chemistry

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8 stream/harbor sediment samples
bulk chemistry, elutriate, particle size, benthos, bottom characterization

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7 river, 1 harbor, 1 disposal, 1 reference samples
bulk chemistry, elutriate, bioassay, particle size

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bioassay

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bulk chemistry, elutriate, particle size

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8 river/harbor, 2 disposal, 2 reference
bioassay

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8 harbor, 1 disposal, 2 reference samples
elutriate, bulk chemical, particle size, bioassay

<u>West Harbor</u>

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10 harbor, 3 reference site samples
bulk chemistry, elutriate, bioassay, particle size

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4 disposal site samples
bioassay, particle size

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4 disposal site samples
bioassay, benthos

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2 harbor, 9 disposal samples
bulk chemistry, particle size

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bulk chemistry, elutriate, particle size

Wilson Harbor

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4 harbor samples
bulk chemistry

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4 harbor samples
bulk chemistry

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5 harbor, 1 reference, 1 disposal samples
bulk chemistry, elutriate, bioassay, particle size

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5 harbor, 2 disposal, 2 reference samples
bioassay

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4 harbor, 1 disposal, 1 reference samples
bulk chemistry, elutriate, bioassay, particle size

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5 harbor, 1 disposal, 1 reference site
bulk chemistry, particle size, elutriate, bioassay

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bulk chemical & grain size analyses

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bulk chemical and physical analyses, elutriate test

Michigan City Harbor

"Letter Report on Confined Disposal Area for Michigan City Harbor Indiana" USACE Chicago District, May 1976.
elutriate test

"Michigan City Harbor Dredging and Disposal Operations 1978-1979 After-Action Report" USACE Chicago District, July 1979.
bulk chemical analysis

"Sediment Quality Monitoring Michigan City Harbor & Trail Creek Michigan City, Indiana" by Daily & Associates, Engineers, Inc., April 1986.
bulk chemical, particle size analyses

Waukegan Harbor

"Waukegan Outer Harbor Sediment Analysis" USACE Chicago District, June 1981.
grain size analysis & total PCB analysis and elutriate test for total PCB

"Waukegan Harbor, Illinois Analysis of Sediment Samples Collected in October 1981" USACE Chicago District, May 1982.
bulk chemical & particle size analysis and elutriate test

"Waukegan Harbor, Illinois Analysis of Sediment Samples Collected in November 1982" USACE Chicago District, February 1983.
bulk chemical analysis and modified elutriate test

"Waukegan Harbor Sediment Sampling" by Mirza Engineering Inc., October 1987.
depth determination of sediment within the inner harbor

"Waukegan Harbor, Illinois Collection and Analysis of Sediment Samples from the Navigation Project" by Randolph & Associates, Inc., December 1987.
bulk chemical and grain size analysis

"Analysis of Pore Water from Sediment at Waukegan Harbor, Illinois" by James M. Brannon, WES, May 1988.
bulk chemical & grain size analysis and total phenol

"Waukegan Harbor, Illinois Report of Sediment Sampling Activities Approach Channel" by Northern Laboratories, December 1990.
PCB and grain size analyses

Summary of Sediment Investigations
at USACE Navigation Projects
within the Detroit District (as of 11/96)

HARBOR	DATE[1]	CLASS[2]	REMARKS
ALGOMA WISC	1991	PRT	PROPOSED DREDGING FY93
ALPENA MICH	1995	CLN	
ARCADIA MICH	1996	CLN	
ASHLAND WISC	1992	CLN	EPA - MOD POLL
AUSABLE MICH	1991	CLN	WORKING ON EPA CNCR
BAYFIELD WISC	1992	-	
BAY PORT MICH	1991	CLN	FY91-OUT FED CHNL-MFR-IN
BEAVER BAY MINN (SILVER BAY)	1975	PRT	NOT CONSTRUCTED
BELLE RIVER MICH	1978	CLN	
BENTON HARBOR MICH	1983	NC	ONLY PHYS DESC OF CDF SAMPLES
BIG BAY MICH	1994	CLN	
BIG SUAMICO RIVER WISC	1993	CLN	SUITABLE FOR BN
BLACK RIVER (UP) MICH	1994	CLN	SUITABLE FOR BN
BLACK RIVER P.H. MICH	1990	PRT	FY90-5 ADDITIONAL SAMPLES
BOLLES MICH	1994	PRT	FY86-OUTER SECTION ONLY
CASEVILLE MICH	1990	CLN	
CEDAR RIVER MICH	1994	CLN	NOT CONSTRUCTED
CHARLEVOIX MICH	1985	CLN	BOWMAN-EAB WORKING ON EPA
CHEBOYGAN MICH	1992	CLN	'83-ELUTRIATE ANALYSIS ONLY
CHIPPEWA MICH	0	-	NO DREDGING FORECAST
CHNLS LAKE ST CLAIR MICH	1994	CLN	EPA RECOMM ADDNL SAMPLING
CHNLS STRTS OF MACKINAW MICH	0	-	(ONLY WATER Q DATA-1978)
CLINTON RIVER MICH	1989	PRT	
CORNUCOPIA WISC	1995	CLN	SUITABLE BN/PER EAB (CLASS
CROSS VILLAGE MICH	1979	CLN	NOT CONSTRUCTED
DETOUR MICH	0	-	
DETROIT RIVER MICH	1995	CNTM	WORKING ON EPA CNCR FY91
DETROIT RIVER,(PTE. MOUILLEE)	1993	CNTM	ACCESS N&S CHNLS & CELL 1
DULUTH-SUPERIOR MINN-WISC	1995	PRT	FY86,87 PARTIAL;FY90 SUP
EAGLE HARBOR MICH	1986	CLN	
FOX RIVER LOCK&DAMS WISC	1989	-	NO DREDGING FORECAST
FRANKFORT MICH	1992	PRT	
GRAND HAVEN R&H MICH	1996	PRT	FY92-GRAND RIVER(NO
GRAND MARAIS MICH	1994	CLN	
GRAND MARAIS MINN	1987	CNTM	
GRAND TRAVERSE BAY MICH	1990	CLN	
GRAYS REEF PASSAGE MICH	0	-	NO DREDGING FORECAST
GREEN BAY WISC	1994	PRT	FY86 (OUTER END DATA ONLY)
HAMMOND BAY MICH	1991	CLN	
HARBOR BEACH MICH	1991	CLN	(85 MARINA ONLY) CHECK 91
HARRISVILLE MICH	1995	CLN	
HOLLAND MICH	1994	PRT	FY92 ARSENIC & PART
INLAND RTE CHEBOYGAN R. MICH	1992	CLN	
INLAND RTE CROOKED R. MICH	1992	CNTM	
INLAND RTE INDIAN R. MICH	1992	CLN	
KAWKAWLIN MICH	1989	PRT	
KENOSHA WISC	1995	PRT	OUTER CLASS 96

KEWAUNEE WISC	1992	PRT	1986 (OUTER ONLY)
KEWEENAW WATERWAY MICH	1993	PRT	
KNIFE RIVER MINN	1983	CNTM	
LAC LA BELLE MICH	1988	CLN	REC'D PREL CONC
LAPOINTE WISC	1990	CLN	
LELAND MICH	1996	CLN	
LES CHENEAUX MICH	1986	PRT	
LEXINGTON MICH	1996	CLN	SILTY-SAND;DISP PROB OW
LITTLE BAY DENOC MICH	0	-	
LITTLE LAKE MICH	1995	CLN	
LUDINGTON MICH	1991	CLN	
LUTSEN (SCHROEDER) MINN	0	-	NOT CONSTRUCTED
MACKINAW CITY MICH	0	-	
MANISTEE MICH	1991	CLN	
MANISTIQUE MICH	1990	PRT	
MANITOWOC WISC	1995	PRT	WAITING FOR CORRECTED DATA
MARQUETTE MICH	1984	CLN	
MENOMINEE MICH-WISC	1994	PRT	
MILWAUKEE WISC	1993	CNTM	IN 86 - 6 STNS AROUND CDF
MONROE MICH	1993	CNTM	INNER/OUTER DATA
MUSKEGON MICH	1993	CLN	
NEW BUFFALO MICH	1991	CLN	
OCONTO WISC	1988	CLN	REC'D WRITTEN CLASS-UPLAND
ONTONAGON MICH	1995	CLN	WAITING FOR CORRECTED DATA
PENSAUKEE WISC	1991	CLN	NEED STA MAP & PART SIZE
PENTWATER MICH	1992	CLN	
PETOSKEY MICH	0	-	NO FEDERAL CHANNEL
PINE RIVER MICH	1970	CNTM	NO DREDGING FORECAST
POINT LOOKOUT (AU GRES) MICH	1992	CLN	
PORT AUSTIN MICH	1989	CLN	LAST DREDGED 66
PORT SANILAC MICH	1990	CLN	DISP CONCERNS
PORT WASHINGTON WISC	1987	CNTM	
PORT WING WISC	1990	CLN	SUITABLE FOR BN
PORTAGE LAKE MICH	1992	CLN	
PRESQUE ISLE MICH	1992	CLN	
RACINE HARBOR WISC	1976	CLN	NO DREDGING FORECAST
ROUGE RIVER MICH	1993	CNTM	RIVER
SAGINAW RIVER MICH	1996	CNTM	OUTER NOT CLASSIFIED
SAUGATUCK MICH	1986	CLN	
SAXON WISC	1993	CLN	RESTRICTED UNCONFINED UPLAND
SEBEWAING MICH	1991	CLN	
SHEBOYGAN WISC	1993	PRT	OUTER (INNER 84 Y N N, UNDER
SOUTH HAVEN MICH	1992	PRT	
ST CLAIR RIVER MICH	1995	PRT	FY91-8 STA
ST JAMES MICH	1993	-	
ST JOSEPH MICH	1996	PRT	EAB DID DUPLICATE SAMPLING
ST JOSEPH RIVER MICH	0		NO DREDGING FORECAST
ST MARYS RIVER MICH	1992	CLN	
STURGEON BAY WISC	1992	PRT	
TAWAS BAY MICH	0	-	
TRAVERSE CITY MICH	1985	CLN	WORKING ON EPA CNCR
TWO HARBORS MINN	1982	CNTM	
TWO RIVERS WISC	1996	CLN	OUTER HARBOR SUITABLE FOR BN

WASHINGTON ISLE WISC	0	-	
WHITE LAKE MICH	1993	CLN	
WHITEFISH POINT MICH	1988	CLN	REC'D PREL CNCR

[1] Date last sampled. Many of these projects have been sampled every 5 years since the late 1970's.

[2] Classification based on bulk chemistry:
CLN - Clean/uncontaminated
PRT - partially contaminated
CNTM - contaminated

SECTION 3
State Environmental Data

Below is a partial list of reports on ambient water quality conditions in the Great Lakes and tributaries published periodically by State agencies. On the following pages is a list of Great Lakes areas of concerns and remedial action plan (RAP) coordinators at USEPA Regions and State agencies.

Illinois Environmental Protection Agency. 1990. "Illinois Water Quality Report; 1988-1989," Division of Water Pollution Control, Springfield, IL.

Indiana Department of Environmental Management. 1990. "Indiana Water Quality, 1988: Monitor Stations Records," Office of Water Management, Indianapolis, IN.

Michigan Department of Natural Resources. 1990. "Michigan Fixed Station Monitoring; 1989 Annual River Water Quality Report," Surface Water Quality Division, Lansing, MI.

Minnesota Pollution Control Agency. 1989. "Water Quality Sampling Program, Minnesota Lakes and Streams: A Compilation of Analytical Data, October 1984-September 1987," Division of Water Quality, St. Paul, MN.

New York State Department on Environmental Conservation. 1992. "Biennial Report, Rotating Intensive Basin Studies, Water Quality Assessment Program, 1987-1988, Monitoring and Assessment Bureau, Albany, NY.

Wisconsin Department of Natural Resources. 1992. "Background Concentrations of Trace Metals in Wisconsin Surface Waters," prepared by University of Wisconsin, Madison, WI.

Great Lakes Areas of Concern
and Remedial Action Plan (RAP) Coordinators
(updated February 1998)

Area of Concern	USEPA RAP Coordinator	Phone Number	State RAP Coordinator	State Agency	Phone Number
Ashtabula River, OH	Amy Pelka	312-886-0135	Natalie Farber	Ohio EPA	614-644-2143
Black River, OH	Phil Gehring	216-522-7260		Ohio EPA	
Clinton River, MI	Laura Evans		Robert Sweet	Mich DEQ	517-335-4182
Cuyahoga River, OH	Mark Moloney	440-835-5200	Kelvin Rodgers	Ohio EPA	330-963-1117
Deer Lake/Carp River, MI	Mark Messersmith		Sharon Baker	Mich DEQ	517-335-3310
Detroit River, MI	Mark Olender		Robert Sweet	Mich DEQ	517-335-4182
Eighteen Mile Creek, NY	Alice Yeh Barbara Spinweber				
Fox River/Green Bay, WI	Callie Bolattino	312-353-3490	Bob Behrens	Wis DNR	920-448-5133
Grand Calumet River/ Indiana Harbor, IN	Karen Turner	312-886-1437	Scott Ireland	Ind DEM	
Kalamazoo River, MI	Marcia Damato	312-886-6297	Roger Eberhardt	Mich DEQ	517-335-1119
Manistique River, MI	Jim Hahnenberg	312-353-4213	Roger Eberhardt	Mich DEQ	517-335-1119
Maumee River, OH	Dave Barna	440-835-5200	Cherie Blair	Ohio EPA	419-373-3010
Menominee River, MI/WI	Chuck Anderson		Roger Eberhardt Terry Lohr	Mich DEQ Wis DNR	517-335-1119 608-267-2375
Milwaukee Harbor, WI	Steve Jann	312-886-2446	Sharon Gayan	Wis DNR	414-263-8707
Muskegon Lake, MI	Sheri Bianchin		Roger Eberhardt	Mich DEQ	517-335-1119
Niagara River/Buffalo River, NY	Alice Yeh Barbara Spinweber			NY DEC	

Great Lakes Areas of Concern
and Remedial Action Plan (RAP) Coordinators (continued)

Area of Concern	USEPA RAP Coordinator	Phone Number	State RAP Coordinator	State Agency	Phone Number
Oswego River, NY	Alice Yeh Barbara Spinweber		Bob Townsend	NY DEC	518-457-7470
Presque Isle Bay, PA	Chuck Sapp	215-597-9096	Kelly Burch	Penn DEP	814-332-6816
River Raisin, MI	Amy Nerbun		Robert Sweet	Mich DEQ	517-335-4182
Rochester Embayment, NY	Alice Yeh Barbara Spinweber		Margy Peet	NY DEC	518-457-7470
Rouge River, MI	Quintin White		Robert Sweet	Mich DEQ	517-335-4182
Saginaw River/Bay, MI			Robert Sweet	Mich DEQ	517-335-4182
Sheboygan Harbor, WI	Susan Prout		Chip Krohn	Wis DNR	414-229-0862
St. Clair River, MI	Tom Matheson		Robert Sweet	Mich DEQ	517-335-4182
St. Lawrence River, NY	Alice Yeh Barbara Spinweber	212-264-7678	Berton Mead	NY DEC	518-457-7463
St. Louis River/Bay, MN/WI			Brian Frederickson Ted Smith	Minn PCA Wis DNR	218-723-4663 715-635-4071
St. Mary's River, MI	Jennifer Manville		Roger Eberhardt	Mich DEQ	517-335-1119
Torch Lake, MI	Rita Garner		Sharon Baker	Mich DEQ	517-335-3310
Waukegan Harbor, IL	Matt Didier	312-886-6711	Robert Schacht	Ill EPA	
White Lake, MI	Mike Ribardy	312-886-4592	Roger Eberhardt	Mich DEQ	517-335-1119

USEPA Region 5 has RAP Coordinators for areas of concern in Ohio, Michigan, Indiana, Illinois, Wisconsin and Minnesota. Regions 2 and 3 have RAP Coordinators for areas of concern in New York and Pennsylvania, respectively.

SECTION 4
Bibliography of Information Related to STFATE Application

This section contains a partial bibliography of publications containing measurements of water currents and temperature needed to use the STFATE model to determine mixing zones from dredged material disposal operations during Tier 2.

Bennett, J.R. 1971. "Thermally Driven Lake Currents During the Spring and Fall Transition Periods," WIS-SG-72-326, NOAA-72102703, University of Wisconsin, Marine Studies Center, Madison, WI.

Dettman, E.H. 1982. "Transport of Particulate Matter by Shearing Currents in Lake Erie; 1980," GRAI8207 NSA0600, Argonne National Lab, IL, Department of Energy, Washington, DC.

Federal Water Pollution Control Administration. 1967. "Water Quality Investigations, Lake Currents: Lake Michigan Basin," PB-230 819/5, Great Lakes Region, Chicago, IL.

Gedney, R. and W. Lick. 1969 "Numerical Calculations of the Steady-State, Wind-Driven Currents in Lake Erie," NASA-TM-X-52786, National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH.

Gedney, R.T. and W. Lick. 1971. "Numerical Calculations of the Wind Driven Currents in Lake Erie and Comparison with Measurements," NASA-TM-X-67804, National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH.

Gottlieb, E.S.; Saylor, J.H.; Miller, G.S. 1989. "Currents and Temperatures Observed in Lake Michigan from June 1982 to July 1983; NOAA-TM-ERL-GLERL-71; NOAA, Great Lakes Environmental Research Lab, Ann Arbor, MI.

Gottlieb, E.S., Saylor, J.H. and G.S. Miller. 1989. "Currents, Temperatures, and Divergences Observed in Eastern Central Lake Michigan during May-October 1984," NOAA-TM-ERL-GLERL-72, NOAA, Great Lakes Environmental Research Lab, Ann Arbor, MI.

Gottlieb, E.S., Saylor, J.H. and G.S. Miller. 1990. "Currents and Water Temperatures Observed in Green Bay, Lake Michigan; Part 1 Winter 1988-1989; Part 2 Summer 1989," NOAA-TM-ERL-GLERL-73, NOAA, Great Lakes Environmental Research Lab, Ann Arbor, MI.

Huang, J.C. 1970. "The Thermal Current in Lake Michigan," AD-725 715, Scripps Institution of Oceanography, La Jolla, CA.

Johnson, R.G. and E.C. Monahan. 1971. "Current Meter Observations of the Circulation in Grand Traverse Bay of Lake Michigan; Mooring Methods and Initial Results," TR-18, NOAA-72020202, University of Michigan, Dept of Meteorology and Oceanography, Ann Arbor, Michigan.

Katz, P.L. and G.M. Schwab. 1976. "Currents and Pollutant Dispersion in Lake Michigan, Modeled with Emphasis on the Calumet Region," UILU-WRC-76-0111, W77-03732, Illinois University at Urbana-Champaign, Water Resources Center, Office of Water Research and Technology, Washington, DC.

Lick, W. 1976. "Numerical Models of Lake Currents," GRAI7615, Case Western Reserve University, Ohio Dept. of Earth Sciences, Cleveland, OH.

Monahan, E.C. and C.R. Zietlow. 1968. "A Study on the Onset of Whitecapping with Increased Surface Wind Speeds," Northern Michigan University.

Monahan, E.C. and P.C. Pilgrim. 1975. "Coastwise Currents in the Vicinity of Chicago, and Currents Elsewhere in Southern Lake Michigan," NOAA-75082103, NOAA, Office of Sea Grant, Rockville, MD.

Ragotzkie, R.A. 1966. "The Keweenaw Current, A Regular Feature of the Summer Circulation of Lake Superior," TR-29, University of Wisconsin, Dept of Meteorology, Madison, WI.

Saunders, K.D. and L.S. Van Loon. 1976. "Water Resources Research Program; Nearshore Currents and Water Temperatures in Southwestern Lake Michigan, Progress Report, June-December 1975," GRAI7712, NSA0200, Energy Research and Development Administration, Argonne National Lab., IL.

Saunders, K.D. and J.D. Ditmars. 1981. "Nearshore Currents in Lake Michigan Between Milwaukee and Chicago, 1977-78: Implications for Transport," IINR-81/31, Argonne National Lab., IL Energy and Environmental Systems Div. Corp, Illinois Inst. of Natural Resources, Chicago, IL.

Saylor, J.H and G.S. Miller. 1976. "Winter Currents in Lake Huron," NOAA-TM-ERL-GLERL-15, NOAA-77112304; EPA/905/4-75-004, NOAA, Great Lakes Environmental Research Lab, Ann Arbor, MI.

Saylor, J. H. and G.S. Miller. 1984. "Investigation of the Currents and Density Structure of Lake Erie; 1983," NOAA-TM-ERL-GLERL-49, NOAA-84010302, NOAA, Great Lakes Environmental Research Lab, Ann Arbor, MI.

Sheng, Y.P. 1975. "Lake Erie International Jetport Model Feasibility Investigation," WES-CR-H-75-1, Case Western Reserve University, Ohio Dept of Earth Sciences, Cleveland, OH.

Sloss, P.W. and J.H. Saylor. 1976. "Measurements of Current Flow During Summer in Lake Huron," NOAA, Great Lakes Environmental Research Lab, Boulder, CO.

Sloss, P.W. and J.H. Saylor. 1976. "Large-Scale Current Measurements in Lake Superior," GLERL-8, GLERL-CONTRIB-61, NOAA-76060104, NOAA-TR-ERL-363, NOAA, Great Lakes Environmental Research Lab, Ann Arbor, MI.

U.S. Public Health Service. 1963. "Lake Michigan Studies, Currents in the Southern Basin," LM 12, GRAI7707, Great Lakes-Illinois Rivers Basins Project, Chicago, IL.

U.S. Public Health Service. 1963. "Lake Michigan Studies, Introduction to Lake Current Studies," LM 7, Great Lakes-Illinois River Basins Project, Chicago, IL.

SECTION 5
List of Great Lakes Critical Pollutants

The attached is a consolidated list of critical contaminants identified in Lakewide Management Plans (LaMPs) and bioaccumulative chemicals of concern (BCCs) defined in the proposed Great Lakes water quality criteria. The attached may be used in Tier 1 to aid in the development of a contaminant of concern list and identifying bioaccumulative contaminants.

SECTION 6
Lipid Levels of Selected Aquatic Organisms

The following pages contain tables of lipid levels in selected fish species of the Great Lakes as a reference for applying the TBP procedures in Tier 2. These tables were from the following references:

Clarke, J.U., Whitman, P.L. and J. Dorkin. 1992. "Trends in PCB contamination in fishes from the Wisconsin waters of Lake Michigan," Miscellaneous Paper D-92-3, USACE Waterways Experiment Station, Vicksburg, MS.

USEPA. 1992. "National study of chemical residues in fish," EPA 823-R-92-008 A&B,

Average Percent Lipid For Selected Species and Sample Types in Fishes From the Wisconsin Waters of Lake Michigan, 1978-1986 (after Clarke et al. 1992)

Fish species	% Lipid (N)			
	Whole Fish	Edible Portion	Fillet	Skin-on Fillet
Brook trout	7.0 (1)	3.8 (2)	4.7 (89)	n/a
Brown trout	14.2 (3)	4.0 (2)	11.0 (251)	n/a
Bullhead sp.	2.6 (8)	n/a	2.3 (2)	1.3 (10)
Carp	11.3 (60)	n/a	13.4 (46)	n/a
Channel catfish	15.0 (1)	n/a	n/a	9.4 (14)
Chinook salmon	6.6 (12)	n/a	3.8 (417)	2.53 (23)
Coho salmon	3.6 (15)	n/a	3.9 (145)	2.5 (23)
Lake trout	12.9 (7)	2.7 (1)	13.4 (269)	n/a
Northern pike	3.1 (6)	n/a	1.3 (25)	n/a
Rainbow trout	3.0 (3)	3.9 (2)	6.9 (125)	n/a
Smallmouth bass	6.6 (2)	n/a	1.2 (10)	n/a
Walleye	11.1 (7)	n/a	4.1 (23)	n/a
Yellow perch	5.1 (8)	n/a	1.0 (26)	n/a
36 fish species combined (N) [Standard Error]	9.4 (235) [0.44]	3.4 (16) [0.26]	7.6 (1606) [0.15]	4.2 (50) [0.61]

Legend: n/a = no analyses performed
N = number of samples analyzed.

NOTE: Species, size and age, sex, season, lake or sub-basin, and tissue collection type are all important variables that are sometimes correlated with percent lipid. Averages from larger data sets are more appropriate for use in TBP algorithm.

Average Percent Lipid For Selected Species and Sample Types in Fishes From the Waters of Great Lakesother than Lake Michigan, 1983-1989 (from USEPA 1992)

Fish species	% Lipid (N)			
	Whole Fish	Edible Portion	Fillet	Skin-on Fillet
LAKE ERIE Carp	8.1 (4)	n/a	n/a	n/a
LAKE ERIE Coho salmon	n/a	n/a	1.8 (2)	n/a
LAKE ERIE Smallmouth bass	3.1 (1)	n/a	3.1 (1)	n/a
LAKE HURON Brown trout	n/a	n/a	5.6 (1)	n/a
LAKE HURON Carp	7.3 (1)	n/a	4.5 (29)	n/a
LAKE HURON Channel catfish	n/a	n/a	7.7 (4)	n/a
LAKE HURON Coho salmon	n/a	n/a	2.4 (1)	n/a
LAKE HURON Smallmouth bass	n/a	n/a	1.0 (1)	n/a
LAKE HURON Walleye	2.1 (30)	n/a	n/a	n/a
LAKE HURON Yellow perch	n/a	n/a	0.5 (2)	n/a
LAKE ONTARIO Coho salmon	n/a	n/a	1.6 (3)	n/a
LAKE SUPERIOR Coho salmon	n/a	n/a	2.8 (2)	n/a
LAKE SUPERIOR Northern Pike	n/a	n/a	1.4 (1)	n/a

Legend: n/a = no analyses performed
N = Number of samples analyzed. Some may be composites of multiple fish.

NOTE: Species, size and age, sex, season, lake or sub-basin, and tissue collection type are all important variables that are sometimes correlated with percent lipid. Averages from larger data sets are more appropriate for use in TBP algorithm.

SECTION 7
State Fish Consumption Advisories for the Great Lakes

The Great Lakes States and Canadian provinces have an agreement to work together to develop common fish consumption advice for Great Lakes waters. A technical committee established by the Great Lakes Governors and Premiers Conference meets each year to compile all available data and determine the advice for the coming fishing season. This information is usually published by the Health Departments of each State in April of each year, and is distributed with fishing licenses, posted in appropriate locations, and announced in press releases. Typically, the statewide advisory is prepared by a committee including toxicologists from the human health field, fisheries biologists, and analytical personnel from State laboratories.

Fish consumption advisories are data driven, and subject to change, especially if important new data become available after publication of the year's advisory. They are sometimes supplemented by press releases during the year.

The most recent State advisories for the Great Lakes have been stable for two years. A tabular summary of these advisories for 1991 or 1992 is provided on the following pages. It should be noted that the State advisory documents themselves contain specific information on the species and sizes of fish affected, specific advice on maximum consumption rates for sensitive population groups such as women of child bearing age, and advice on cleaning and preparation of fish prior to consumption.

A list of State points-of-contact for further information on fish advisories is also provided in a table.

Summary of Public Health Fish Consumption Advisories
for the Great Lakes

	POLLUTANT(S)
LAKE ERIE BASIN	
Lake Erie (Applies to **Michigan, Ohio, and Pennsylvania** waters)	PCBs, Chlordane
Michigan	
Clinton River (Downstream from Yates Dam, Oakland County)	PCBs, Mercury
Detroit River	PCBs, Mercury
Lake St. Clair	PCBs
River Raison (Downstream from Winchester Bridge, Monroe)	PCBs
Rouge River (Middle Branch downstream from Phoenix Lake and Main Branch downstream from M-153/Ford Road)	PCBs
Rouge River, Lower Branch (Wayne County)	PCBs
St. Clair River	PCBs, Mercury
Ohio	
Ottawa River - Toledo, State Route 23, Route 475 to Lake Erie - 19 miles	PCBs
Black River - 31st Street Bridge (Lorain) to Harbor 6.2 miles (includes Continued Disposal Facility)	PAHs
Ashtabula River - 24th Street Bridge to Ashtabula River Mouth (includes Harbor area within breakwater - 2.3 miles	PCBs, Hexachlorobenzene Pentachlorobenzene Tetrachlorobenzene
LAKE HURON BASIN - MICHIGAN	
Lake Huron	PCBs
Au Sable River at Oscoda (Losco County)	PCBs
Cass River (Downstream from Bridgeport)	Dioxin
Cheboygening Creek (Saginaw County)	PCBs
Kawkawlin River (Bay County)	PCBs
Pine River (Downstream from St. Louis, Gratiot, and Midland Counties)	PCBs
Saginaw Bay	PCBs
Saginaw River (Entire Length)	PCBs, Mercury
St. Mary's River	Mercury
Shiawassee River (Byron Road to Owosso)	PCBs
Shiawassee River, South Branch (M-59 to Byron Road)	PCBs

Thompson Lake (Livingston Co.)	PCBs, Mercury
Thunder Bay (including Thunder Bay River to first dam.)	PCBs
Tittabawasee River (Downstream from Midland)	PCBs, Dioxin
LAKE MICHIGAN BASIN	**POLLUTANTS**
Lake Michigan: Wisconsin, Michigan, Illinois, & Indiana Waters - Tributaries	PCBs, Mercury, Chlordane
Michigan	
Bear Lake (Muskegon County)	PCBs, Mercury
Black River downstream from South Branch and South Branch downstream from Breedsville Dam (Van Buren Cty)	PCBs
Escanaba River (Between Dam 1 and Dam 2, Delta County)	Dioxin
Glen Lake (Leslanau County)	Mercury, Chlordane
Grand River (Clinton County)	PCBs
Green Bay (South of Cedar River, applies to Michigan and Wisconsin Waters including Menominee, Oconto, and Peshtigo Rivers from mouth to first dam)	PCBs
Hersey River (Downstream from Read City)	PAHs
Kalamazoo River (Downstream from City of Battle Creek to Morrow Pond Dam, Kalamazoo County)	PCBs
Kalamazoo River (Downstream from Morrow Pond Dam to Allegan Dam) and Portage Creek (Downstream from Monarch Mill Pond, Kalamazoo County)	PCBs
Kalamazoo River (Downstream from Allepan Dam to Lake Michigan, Allegan County)	PCBs
Lake Macatawa (Ottawa County)	PCBs, Mercury
Lake Michigamme, Michigamme Reservoir, Peavy Pond, Paint River Pond, and the Michigamme River System to its junction with the Menominee River	Mercury
Little Bay de Noc (Lake Michigan)	PCBs, Mercury
Manistique River (Schoolcraft County Downstream from M-94/Old U.S.2)	PCBs
Menominee River	Mercury
Mona Lake (Muskegon County)	Mercury, Dioxin
Net River (Iron County)	PCBs, Mercury
Round Lake (Marquette County)	Mercury
St. Joseph River (Downstream from Barrian Springs Dam)	PCBs

White Lake (Muskegon County)	PCBs, Mercury, Chlordane
Wisconsin	
Menominee River from Pier's Gorge through Sturgeon Falls Flowage Menominee River at Lower Scott Flowage	Mercury
Peshtigo River at Peshtigo Flowage from its mouth at Green Bay up to the Peshtigo Dam	Mercury PCBs, Pesticides
Lake Michigan Basin Tributaries (Continued)	**Pollutants**
Lower Fox River from its mouth at Green Bay up to the Peshtigo Dam	PCBs, Pesticides
Lower Fox River from the DePere Dam up to the Neenah-Menasha Dam	PCBs, Pesticides
East and West Twin Rivers from their mouths up to the first dam **NOTE:** Follow Lake Michigan advisory above for trout and salmon.	PCBs, Pesticides
Manitowoc River from its mouth up to the first dam.	PCBs, Pesticides
Sheboygan River in Sheboygan County from the dam at Sheboygan Falls to the Coast Guard station in the City of Sheboygan, including **Greendale and Weedens Creek**	PCBs
Milwaukee River in Milwaukee County (includes Milwaukee Harbor) from its mouth up to the North Avenue dam, including the Kinnickinnic and Menomonee Rivers **NOTE:** Follow Lake Michigan advisory.	PCBs
Milwaukee River from the North Avenue dam in Milwaukee County upstream to the Lime Kiln Dam at Grafton (Ozaukee County)	PCBs
Cedar Creek from the Milwaukee River up to bridge Road in the Village of Cedarburg including Zeunert Pond	PCBs
Root River in Racine County from its mouth upstream to the Horlick Dam in the City of Racine	PCBs
Pike River in Kenosha County from its mouth up to Carthage College in the City of Kenosha	PCBs
Indiana	
Grand Calumet River, East & West Branches and Indiana Harbor Ship Canal	PCBs, Dioxin
LAKE SUPERIOR BASIN	
Lake Superior, Minnesota, Wisconsin, & Michigan Waters	PCBs, Mercury, Chlordane, Toxaphene
Michigan: Dear Lake, Carp R., & Carp Cr. (Marquette County)	Mercury
Torch Lake (Houghton County)	Mercury, Fish Tumors, Course Unknown

Minnesota: St. Louis River, Fond du Lac to the mouth, including Superior Harbor	Mercury, PCBs, Dioxin
LAKE ONTARIO BASIN (New York State)	
Lake Ontario and Niagara River	PCBs, Mirex, Dioxin
Buffalo River and Harbor (Erie County)	PCBs
Oswego River (Power dam in Oswego to Fulton dam)	PCBs
Salmon River (Mouth to Salmon Reservoir, Oswego County)	PCBs
St. Lawrence River (entire river)	PCBs, Mirex, Dioxin

State Points-of-Contact for Information on Fish Consumption Advisories

Agency	Point of Contact	Phone Number
Illinois Dept of Health Illinois EPA	Tom Long Tom Hornshaw	217-782-5830 217-785-0832
Indiana Dept of Health Indiana DEM	Greg Steele C. Lee Bridges	317-633-8554 317-243-5030
Michigan Dept of Public Health Michigan DNR	John Hesse Chris Waggoner	517-335-8350 517-335-4189
Minnesota Dept of Health Minnesota PCA	Pam Shubat Marvin Hora	612-627-5059 612-296-7250
New York Dept of Health New York DEC	Tony Fort Larry Skinner	518-458-6409 518-457-1769
Ohio Dept of Health Ohio EPA	Tracey Shelly John Estenik	614-466-1060 614-644-2866
Pennsylvania DER Pennsylvania Fish Commis	Robert Frey Dave Wolf	717-787-1783 717-657-4518
Wisconsin Dept of Health Wisconsin DNR	Henry Anderson Jim Amrheim	608-266-1253 608-266-1253